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CONSOLIDATED TRANSLATION SURVEY

PREFACE

This survey is prepared monthly by the Foreign Documents Division, Office of Central Reference, CIA, from lists received through the cooperation of US government agencies and includes translations prepared by such agencies, private industry, universities, research institutions, and commercial translation organizations. It is a compilation of foreign documentary projects completed or started during the preceding month.

Translations are listed by area and subject category. Scientific projects are grouped as a section regardless of geographic area. Title in English, author, foreign language title of source of material, date of publication, and publication identification of the completed project are given when available. Tables of contents of journals translated cover-to-cover are reproduced from the current publications.

Projects in process, i.e., not completed as of the date of this survey, are noted with an asterisk (*), and, when available, a project-control or "in-process" number is noted in parentheses following the title. Certain details may be unavailable on such projects. New projects in process are not listed again until they are completed.

An index to authors of items in this issue is provided at the end of the $\mathfrak{st}(x\mathbf{vey},$

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Admiralty Center for Scientific Information and Liasion
Queen Anne's Mansions
St. James Park
London, S.W. 1, England

Acta Metallurgica

Acta Metallurgica 122 East 55th Street New York 22, New York

AEC - Atomic Energy Commission (see Department of Commerce)

AERE-Harwell Lib

The Librarian
AERE, Ministry of Supply
Harwe 1, Didcot, Birks
England

Αŗ

Department of Air Force Collection and Dissemination Assistant Chief of Staff, Intelligence ATTN: AFCIN 1B3 Washington 25, D.C.

AGU

American Geophysical Union 1515 Massachusetts Avenue, NW Washington, D.C. 20005

AI - Atomics International (see AEC)

AID - Aerospace Information Division (see OTS)

AIP

American Institute of Physics 335 East 45th Street New York 17, New York

Amer Math Soc

American Mathematical Society 190 Hope Street Providence 6, Rhode Island

APL - Applied Physics Laboratory (see Navy)

Army Map Service - (see ACSI)

BISI

British Iron and Steel Institute 4 Grosvenor Gardens London, S.W. 1, England

BWRA

British Welding Research Association Abington Hall, Abington Cambridge, England

СB

Consultants Bureau, Incorporated 227 West 17th Street
New York 11, New York

CEGB

Central Electricity Generating Board Friars House 157-168, Blackfriars Road London, S.E. 1, England

CRL

Central Research Laboratories, Research Division Broken Hill Proprietary Company, Ltd, Shortland, 2N, New South Wales, Australia

CSIRO

Commonwealth Scientific and Industrial Research Organization 314 Albert Street
East Melbourne, C 2, Victoria
Australia

CTT

Columbia Technical Translations 5 Vermont Avenue White Plains, New York 10600

DDC

Defense Documentation Center TISIA-1 Arlington Hall Station Arlington 12, Virginia

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Defense Intelligence Agency Section: AP-IC Building B Arlington Hall Station Arlington, Virginia

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Doubleday & Company, Incorporated 575 Madison Avenue
New York 22, New York

FTD - Foreign Technology Division (see AF)

GB

Association of Special Libraries and Information Bureau 3 Belgrave Square London S.W. 1, England

HB

Henry Brutcher Technical Translations P.O. Box 157 Altadena, California 91001

HO - Hydrographics Office (see Navy)

HW

General Electric Company Handord Atomic Products Operation Richland, Washington (see AEC)

ID - Intelligence Document (see ACSI)

TEEE

Institute of Electrical and Electronics Engineers 275 Madison Avenue New York, New York 10016

ISA

Instrument Society of America 313 Sixth Avenue Pittsburgh 22, Pennsylvania

JPRS

U.S. Department of Commerce Office of Technical Services Joint Publications Research Service Building T-30 Ohio Drive & Independence Avenue, SW Washington 25, D.C.

MU

University of Melbourne, Languages Section Faculty of Science Parkville, N2, Victoria, Australia

NASA

National Aeronautics and Space Administration 1512 H Street, NW Washington, D.C. 20546

Navy

Department of Navy Office of Naval Intelligence Washington 25, D.C.

NCB

National Coal Board 2 Grosvener Place London, S.W. 1, England

NIII

National Institutes of Health Translating Section, Library Building 10, Room 11N112 Bethesda 14, Maryland

NMS - Navy Medical School (see Navy)

NRL - Naval Research Laboratories (see Navy)

NZDIA

Department of Internal Affairs Translation Service Wellington, New Zealand

ONI - Office of Naval Intelligence (see Navy)

OSA

Optical Society of America, Incorporated 33 University Road Cambridge, Massachusetts 02138

OT

Ministry of Aviation, TIL.1(a), First Avenue House, High Holborn, London, W.C.1, England

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MAIR

Society for Industrial and Applied Mathematics Box 7541 Philadelphia 1, Pennsylvania

SIC

Scientific Information Consultants Limited 661 Finchley Road London N.W.2, England

TIL - Technical Information Library

Ministry of Aviation TIL, 1 (b) Leysdown Road Mottingham London S.E. 9, England

UCRL - University of California Lawrence Radiation Laboratory; Livermore, California (see AEC)

US Army Biological Laboratories -- (see OTS)

USDA

Department of Agriculture Foreign Agricultural Service Room 5086 14th and Independence Avenue, NW Washington 25, D.C.

USRL - United States Research Laboratory (see Navy)

525th MI Gp - 525th Military Intelligence Group (see ACSI)

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USSR Economic

Report on Development of Soviet Consumer Goods, 15 pp. RUSSIAN, rpt, 28 Jan 1964. JPRS 23936

Report on Dovelopment of Soviet Domestic Trade, 14 pp. RUSSIAN, rpt, 28 Jan 1964. JPRS 23936

National Economy, by V. V. Leshkevich, 33 pp. RUSSIAN, bk, <u>Daliniy Vostok</u>, 1963, pp 64-116. ACSI 1-4248-C ID 2204006364

A Brief Description of Krays and Oblast's, by Y. V. Leshkevich, 24 pp. RUSSIAN, bk, <u>Dal'niy Vostok</u>, 1963, pp 133-176. ACSI I-4248-A ID 2204006364

Bulletin of the University of Moscow No 1,1964, by A.N. Rakitnikov, 8 pp. RUSSIAN, bk, Metody izucheniya i Kartografirovaniya Ispol'zoyaniya Zemel', Moscow, 1964, pp 1-5. (Eng Tr) Army Map Service

Organizing the Transportation of Mineral Pertifizers, by A. A. Polyakov, 10 pp. RUSSIAN, bk, Nauchnyye Trudy K, KhllT, Khar⁴kov, 1962, pp 88-96. JPRS 24205

Problems Involved in the Total Electrification of the USSR and Technical Progress in Power Engineering Construction, by P. S. Neporozhuly, 53 pp. RUSSIAN, bk, <u>Problems Sploshnoy Elektrifikatsii</u> SSSR 1 Tekhnicheskiy Progress v Energostroitel stve, 1960, pp 3-45, 9692315 FTD-17-63-820

Questions of Statistics of the Prime Cost of Industrial Production, by D. I. Vaynsnenker. (DC-10496)
RUSSIAN, bk, <u>Voprosy Statistiki Sebestotmostl Promyshlennoy Produktsii</u>, Moscow, 1963, pp 1-178.
*JPRS

The Contribution of Signal Men to the Reconstruction of Railroad Transport, by N. M. Semenov, 9 pp. RUSSIAN, per, Automatyka, Telemekhanika i Svyaz, No 1, 1964, pp 1-3.

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USSR Economic (Contd)

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JPRS 24541

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End Product Should be the Main Index in Construction, 7 pp. RUSSIAN, np. <u>Stroitel Gazeta</u>, 15 Jan 1964, pp 2, 3. JPRS 24158

USSR Economic (Contd)

Problems in the Chemicalization of Construction and the Building Materials Industry, by B. G. Skramtayev, 8 pp. RUSSIAN, per, Stroitel Material, No 1, 1964, pp 3-6. JPRS 24588

Measures for Proper Expansion of the Gypsum Industry, by A. Y. Volzhenskiy, S. S. Pechuro, 7 pp. RUSSIAN, per, Stroitel Material, No 1, 1964, pp 15-18.
JPRS 24588

Main Directions of Growth of the Building Materials Industry in 1964-1965, by A. I. Boguslavskiy, 6 pp. RUSSIAN, per, <u>Stroitel Material</u>, No 2, 1964, pp 1-16, JPRS 24588

Machine for Heat and Cold, by S. Tumanskiy, M. Dubinskiy.

RUSSIAN, per, <u>Tekhnika Molodezhi</u>, No 10, 1963, pp 35, 36.

*ACSI I-4446

1D 2204010164

525th MI Gp

Past and Future Transport and Construction Projects, Projects, 21 pp. RUSSIAN, per, Transport Strottel, No 1, 1964, pp 1-5; 12, 13, 18, 19, 22, 23, 26, 27. JPRS 24271

Young Workers in Sewing Industry, by N. Nadezhdina, 5 pp. RUSSIAN, np. <u>Trud.</u> 12 Jan 1964, p 2. JPRS 24255

Industrial Safety Calls for More Attention, by I. Luk'yanov, 5 pp. RUSSIAN, per, <u>Trud</u>, 6 Peb 1964, p 2. JPRS 24541

Cement Production in the USSR, by V. I. Satarin, 7 pp. RUSSIAN, per, <u>Taemen</u>, No 6, Nov, Dec 1963, pp 1, 2. JPRS 24158

Rising Cement Production and Consumer Needs: Call for Further Specialization of Plants, by A. N. Lyusov, 8 pp.
RUSSIAN, per, <u>Tsement</u>, No 6, Nov, Dec 1963, pp 4, 5.
JPRS 24158

Tasks of the Cement Industry in the Accelerated Growth of Chemical Industry, 6 pp. RUSSIAN, per, <u>Tsement</u>, No 1, Jan, Feb 1964, pp 1-3. JPRS 24588

Investigation of Large, Heavily-Loaded Threaded Joints, by V. P. Artyukhov, B. A. Morozov. RUSSIAN, per, Yest Mash, No 2, 1903, pp 34-36, *ACSI 1-4632 ID 2204015064

Reserves for Increasing the Inventory of Operating Industrial Equipment, by P. Zel[†]tser, 13 pp. RUSSIAN, per, <u>Yest Statistiki</u>, No 12, 1963, pp 11-20. JPRS 23964

The Application of Mathematical Methods and Electronic Computers for the Analysis of Prime Cost of Production, by V. Korzhevich, I. Khavin, 11 pp. RUSSIAN, per, Vest Statistiki, No 12, 1963, pp 21-29, JPRS 23964

Breakdown of Soviet Population Density According to Economic Regions, 20 pp. RUSSIAN, per, <u>Vest Statistiki</u>, No 12, 1963, pp 72-91, JPRS 23964 Determination of the Level of Mechanization and

Automation of the Level of Mechanization and Automation of Production in Machine Building, by M. Umnyagin, G. Kharaker, 13 pp. RUSSIAN, per, <u>Year Statistiki</u>, No 1, 1964, pp 44-54. JPRS 24282

An Experiment in Calculating the Long Range Size of the Population on the Minsk-1 Computer, by V. Shurakov, Ya. Tsipis, 10 pp. RUSSIAN, per, Vest Statist, No 2, 1964, pp 65-72. JPRS 24373

Women in the USSR, 12 pp. RUSSIAN, per, Vest Statist, No 2, 1964, pp 87-95. JPRS 24373

A Statistical Determination of the Actual Service Life of the Stock of Metal Cutting Machine Tools, by A. Tsigel'nik, 16 pp. RUSSIAN, per, <u>Vest Statist</u>, No 3, 1964, pp 16-25. LPRS 24377

Basic Indicators of the Fuel and Power Balance of the USSR for 1962, 9 pp. RUSSIAN, per, <u>Yest Statist</u>, No 3, 1964, pp 92-96. JPRS 24379

Problems of Optimal Planning, by V. Chernyavskiy, 12 pp. RUSSIAN, per, <u>Voprosy Ekon</u>, No 11, 1963, pp 115-122. JPRS 24107

Basic Comours for Modeling Planned Price Formation, by V. Nemechinev, 25 pp. RUSSIAN, per, <u>Voprosy Ekon</u>, No 12, 1963, pp 105-121, JPRS 24081

Conference on the Application of Mathematical Methods to the Problem of Optimum Location of Various Industries, byYu. Pinkel*shteyn, 8 pp. RUSSIAN, per, <u>Yoprosy Ekon</u>, No 12, 1963, pp 122-125.

JPRS 24481

Methodological Questions Converning the Beonomics of the Chemicalization of the National Economy, 9 pp. RUSSIAN, F 1, Voprosy Ekon, No 12, 1963, pp 137-141. JPRS 24481

A Large Chemical Indistry and Interbranch Combinations, by L. Kochetkov, V. Rebrov, 17 pp. RUSSIAN, per, <u>Voprosy Ekon</u>, No 1, 1964, pp 13-25. JPRS 24351

The Intersectorial Balance Sheet and the System of Matrix Models, by A. Modin, 17 pp. RUSSIAN, per, <u>Voprosy Ekon</u>, No 1, 1964, pp 112-123. JPRS 24081

Problems Pertaining to the Scientific Organization of Labor, by D. Onika, 20 pp. RUSSIAN, per, <u>Voprosy Ekon</u>, No 2, 1904, pp 50-63.

JPRS 24541

Model for Mathematical Economic Planning of a Rational Structure of Production in an Economic Region, by N. Kovalev, 21 pp. RUSSIAN, per, Voprosy Ekon, No 2, 1964, pp 97-108. JPRS 24448

Investments for Chemical Development, by Ye. Manevich, 5 pp. RUSSIAN, np. <u>Vyshka</u>, 29 Jan 1964, p 2. JPRS 24491 USSR Economic (Conrd)

For Rural Mechanizers, 5 pp. RUSSIAN, per, <u>Yyatavka Dostizhenyi Narodnogo Khoz.</u> No 11, 1963, pp 28, 29. JPRS 23901

Improvements to Railroads Planned for 1964-1965, 10 pp. RUSSIAN, per, <u>Zheleznod Transport</u>, No 1, 1964, pp 3-7. JPRS 25271

Moans of Speeding up Delivery of Goods, by M. I. Dentsov, 11 pp. RUSSIAN, per, Zheleznod Transport, No 1, 1964, pp 8-13. JPRS 24271

New Type of Conveyer of Great Carrying Capacity, by L. I. Gorshkov, L. D. Kuz'mich, 6 pp. RUSSIAN, per, <u>Zhelezned Transport</u>, No 1, 1964, pp 37-39. JPRS 24271

Type of Locomotives Needed for the Future, by V. A. Nikanorov, 13 pp. RUSSIAN, per, Zheleznod Transport, No 1, 1964, pp 46-52.
JPRS 24271

Prolonging the Service Life of Apartment Buildings, by N. Nassonov, 6 pp. RUSSIAN, per, Zhillsheh Strottel, No 12, 1963, pp 11-12. JPRS 24158

The Potential Application of Plastics in Construction, by A. Zaytsev, 8 pp. RUSSIAN, per, Zhilish Stroitel, No 2, 1904, pp 1-4. JPRS 24588

Structural Displacements in the Raw Material Balance in Industry in Connection With the Development of the Production of Synthetic Materials, by E. S. Savitskiy, 13 pp.
RUSSIAN, per, Zhur Vses Khim Obshch Imeni D. I. Mendeleyeva, Vol IX, No 1, 1964, pp 12-18.
JPRS 24280

On the Economic Effectiveness of Capital Investment In the Chemical Industry, by I. D. Fotinich, 13 pp. RUSSIAN, per, <u>Zhur Vaes Klaim Obshich Invent</u> <u>D. I. Mendeleyeya</u>, Vol IX, No 1, 1904, pp 41-40. JFRS 24280

Economic Analysis of the Prospects for the Development of the Synthetic Rubber Industry, by T. V. Bashkatov, G. N. Zel'dovich, et al., 14 pp.
RUSSIAN, per, Zhur Vses Khim Obshch Imeni D. I. Mendeleyeva, Vol IX, No. 1, 1964, pp 65-70.
JPRS 24280

Basic Economic Problems In the Prospective Development of the Tire Industry, by I. G. Bachurin, F. I. Yashunskaya, 18 pp.
RUSSIAN, per, Zhur Vses Khim Obshch imeni
D. I. Mendeleyeva, Vol IX, No 1, 1904, pp 70-78.
JPRS 24280

Prospects for the Development of the Chemical Fiber Industry, by I. Ye. Krichevskiy, 16 pp. RUSSIAN, per, <u>Zhur Vses Khim Obshch Imeni</u> <u>D. I. Mendeleyeva</u>, Vol IX, No 1, 1964, pp 79-86, JPRS 24280 Production at Bobruysk Machine, by M. Kapelchik, A. Hyushenko, 6 pp. BELO-RUSSIAN, np, Sovet Belorussia, 25 Dec 1963, p 2. JPRS 23939

Extend the Life of Machine Tools, by M. Kormyzov, V. Maksimenko, et al, 9 pp. BELO-RUSSIAN, np. Sovet Belorussia, 25 Jan 1964, 5 2. JPRS 23890

USSR Political

Talks on Political Subjects, by L. F. Hichev, 217 pp. RUSSIAN, bk, Bosedy na Politicheskiye Temy, Moscow, 1964, 343 pp. JPRS 24219

Soviets Publish Book on International Communist Heroes, 7 pp. RUSSIAN, np. <u>Izvestiya</u>, 7 Apr 1964, p 4. JPRS 24427

Leninism Lauded on Lenin's 94th Birthday Anniversary, by V. Snastin, 8 pp. RUSSIAN, up, Izvestiya, 22 Apr 1904, p 2. JPRS 24548

Izvestlyn Editorial on Khrushchev Peace Policy, 5 pp. RUSSIAN, nρ. <u>Izvestlya</u>, 28 Apr 1964, p 1. JPRS 24598

International Marxist Discussions Produce 11 New Books, by Yu. Shchirovskiy, 10 pp. RUSSIAN, per, pp 102-106. JPRS 23863

The Heart of Communist Training, 12 pp. RUSSIAN, per, Kommunist, No 4, Mar 1964, pp 3-11, JPRS 24082

Leminism is the Banner for Our Victories, 13 pp. RUSSIAN, per, <u>Kommunist</u>, No 5, 1964, pp 3-12, JPRS 244!2

The Construction of Communism and the Formation of the New Man, by V. Snastin, 14 pp. RUSSIAN, per, <u>Kommuniar</u>, No 5, Mar 1904, pp 53-03. JPRS 24404

The Training of the Citizen Soldier, by A. Yepishev, 13 pp.
RUSSIAN, per, Kommunist, No 5, Mar 1904, pp 04-73.
JPRS 24404

Soviet Lenin Peace Policy Praised in CPSU Organ, by N. Inozemtsev, 13 pp. RUSSIAN, per, Kommunist, No 6, Apr 1964, pp 29-38.

JPRS 24026

Survey of Recent Soviet Books Reflecting International Unity, by G. Lomidze, 15 pp. RUSSIAN, per, Kontmundst, No 6, Apr 1964, pp 83-93. JPRS 24626

Soviet View of Correct Strategy and Tactics for Communist Parties Now, by M. Meshcharyakov, 14 pp. RUSSIAN, per, <u>Kommunist Vooruzhennykh Sil</u>, No 4, Feb 1964, pp 46-53. JPRS 24078

Loyalty to the Principles of Marxism-Leninsm, 5 pp. RUSSIAN, np, <u>Prayda</u>, 3 Apr 1964, p 1. JPRS 24111

Khrushchev Book on Communist Education of New Man Roviewed, by A. Yegorov, 11 pp. RUSSIAN, np. <u>Pravda</u>, 15 Apr. 1964, pp 2, 3. JPRS 24509

Pravda Uses Occasion of Lenth Anniversary to Criticize Chinese, Praise Soviet Communism, by A. Pel'she, 7 pp. RUSSIAN, np. Pravda, 21 Apr 1964, p 2. JPRS 24548

CPSU Attacks Chinese Communist Party in Pravda Some Aspects of Party Life in the Chinese Communist Party, 22 pp. RUSSIAN, np, Pravda, 28 Apr 1964, pp 5, 6; 29 Apr 1964, pp 2, 3.

JPRS 24529

Kiev Party Plenum Backs Decisions of CPSU Central Committee February Plenum, 6 pp. RUSSIAN, np. <u>Pravda Uk; ainy</u>, 16 Apr 1964, p 4. JPRS 24548

Adzhubey Tells Estonian Communist Party of CPSU Fight for Unity, 6 pp. RUSSIAN, np. Sovetskaya Estoniya, 5 Apr 1964, p 3. 1PRS 24427

A New Book on the Soviet Far East Reviewed, by A. P. Okladnikov, 20 pp. RUSSIAN, per, <u>Voprosy Istorii</u>, No 1, 1964, pp. 44-57. JPRS 24123

USSR and China Vie for Influence at Afro-Antan Solidarity Conference: Battle Ends in Draw, French Socialist Weekly Says, by Emile R. Braundt, 5 pp. FRENCH, np, France Observateur, No 726, 2 Apr. 1964, pp 7, 8. JPRS 24401

Bases of Dispute Similarities to Situation in USSR in 1920's, by Isaac Deutscher, 7 pp. ITALIAN, np, <u>PEspresso</u>, No 14, 5 Apr 1964, p 3. JPRS 24598

USSR Military

Chast Commander Organizer of Personnel Training and Education, by R. Ya. Malinowskiy, 15 pp. RUSSIAN, by, <u>Amornet Komandira</u>, Moscow, 1963, pp 3-21.
JPRS 24071

Radioactive Contamination and Means of Protection Against It, by A. S. Zubkin, V. A. Medvedev, To pp. RUSSIAN, bk, Cho Takeye Rad. Zar i Sp. Zashch ot Nego, Moscow, 1963, pp. 20-53. JPRS 24391

Conference on Soviet Military Doctrine, by L. Belousov, 15 pp. RUSSIAN, bk, Konferentsiya o Sovetskoy Voyennoy Doktrike, 1963, pp 121-126, 9692297 FTD-TT-63-1207

Guiding Antiaircraft Missiles to the Target, by I. I. Kyupar, 79 pp.
RUSSIAN, bk, Naved Na Tsel'zeni Raket, Moscow,
1963, pp 1-89.
JPRS 24214

Use of Civilian Reinforced Concrete Construction Elements in a Combat Zone, by O. D. Kulabukhov, RUSSIAN, bk, Shornyye Zholezobeton Fortifikatsion Scoruzhen, Moscow, 1963, pp 103-111. JPRS 24376

Relationship Between Inevitability and Chance in War, by N. Sbytov, K. Spirov, 5 pp. RUSSIAN, per, Kommunist Vooruzhennykh Sil, No 19, Oct 1963, pp 90-92. JPRS 24097

The Particular and General in Military Affairs, by I. Grudinin, 14 pp. RUSSIAN, per, Kommunist Yootuzhennykh Sil, No 23, Dec 1963, pp 46-52. JPRS 24097

Scientific Prediction in Military Affairs, by V. Konopley, 11 pp. RUSSIAN, per, Kommunist Yooruzhennykh Sil, No 24, Dec 1963, pp 28-34. JPRS 24097

Some Features of the Modern Revolution in Military Science, by P. Derevyanko, 15 pp. RUSSIAN, per, Kommunist Vooruzhennykh SII, No 1, 1964, pp 15-25. JPRS 24097

Forty Six Years on Guard for the Fatherland, 12 pp. RUSSIAN, per, Kemmuntst Yoorazhennykh Sil, No 2, Jan 1964, pp 30-36. JPRS 24071

Missiles and Nuclear Weapons Protect Socialist Nations, by I. Mareyev, II pp. Russian, per, Kommundst Vooruzhennykh Sil, No 3 Feb 1964, pp 9-10.

JPRS 24097

Some Special Characteristics of Combat Operations in a Nuclear War, by V. Glazov, 11 pp. RUSSIAN, per, Kommunist Vooruzhennykh Sil, No 3, Feb 1964, pp 41-46. JPRS 24071

The Armed Forces of the USSR in the Postwar Period, by L. Sytov, 10 pp. RUSSIAN, per, Kommunist Vooruzhennykh Sil, No 3, Peb 1964, pp 67-72. JPRS 24071

A New Stage in Armed Forces Development and Troop Training and Indoctrination, by S. Biryuzov, 13 pp. RUSSIAN, per, Kommunist Vooruzhennykli Sil, No 4, Feb 1964, pp 17-26, JPRS 24097

Commander and Time, and What Is Your Opinion, Comrade Readers?, by L. Goncharov, RUSSIAN, np. Krasnaya Zvezda, 18 Jan 1904. 9692300 FTD-11-64-110

Cosmonaut Training, by P. Popovich, N. Kotysh, 5 pp. RUSSIAN, np. <u>Krasnava Zvezda.</u> 20 Feb 1964, p 4. JPRS 24097

Cosmonaut Training, by P. Popovich, N. Kotysh, 6 pp. RUSSIAN, np. <u>Krasnaya Zvezda</u>, 27 Feb 1964, pp 2, 3. JPRS 24097

Commonaut Training, by P. Popovich, N. Ketysh, ó pp. RUSSIAN, np. <u>Krasnaya Zvezda,</u> 6 Mar 1964, p 4. JPRS 24097

Cosmonaut Training and Daily Life, by N. Mclanikov, 6 pp. RUSSIAN, np, Krasnaya Zvezda, 11 Mar 1964, p 4. JPRS 24579

Space Communications Stations, by N. Andreyev, 5 pp. RUSSIAN, np. Krasnaya Zvezda, 17 Mar 1964, p 4.

A Fruitful Space Year, by V. Dobronravov, 5 pp. RUSSIAN, per, Kryltya Rodiny, No 1, 1964, pp 17, 18, JPRS 24071

Improve the Organization of Independent Training of Flight Crews, by I. M. Khomutamikov, 5 pp. RUSSIAN, per, Morskoy Sborntk, No 10, 1963, pp. 49-53. 9692293 AĬĠ PC 620/2-4-64

Submarine Cables, by Yu. V. Mironositskiy, o pp. RUSSIAN, per, <u>Morskoy Sbornik</u>, No 10, 1963, pp 67-72, 9692293 AIG PC 620/2-4-64

The Ideological Struggle in an Atomic War, by A. N. Ramikov, 11 pp. RUSSIAN, per, Morskoy Sbornik, No 2, 1964, pp 9-17. JPRS 23977

Missiles -- Main Weapons of the Fleet, by Y. A. Sychev, 6 pp. RUSSIAN, per, Morskoy Shornik, No 2, 1964, pp 18-25. JPRS 23977

Theory of Naval Science and the Modern Navy, 9 pp. RUSSIAN, per, Morskoy Sbornik, No 2, 1964, pp 41-47. JPRS 23977

Cosmonaut Training Notes by Nikelayev, by Λ. G. Nikolayev, 11 pp. RUSSIAN, np, Sovet Estoniya, 12 Apr 1964, p 2.

Rear Area Units in the Attack, by I. Zakovorotnly, V. Krikunenko. RUSSIAN, pcr, Tyl I Snahzieniye Sovciskish Vooruzheniykh Sil, No I, 1962, pp 20-43.
*ACSI 1-458-A ID 2204014164

Organizing Troop Messing in the Winter Time, by A. Solovev, V. Svinarev. RUSSIAN, per, Tyl i Snabzheniye Sovetskikh Yooruzhennykh Sil, No 1, 1062, pp. 49-52.
*ACSI 1-4585-B ID 2204014164

Success'al Vehicle Operation In the Winter Time, by S. Mazicy. RUSSIAN, per, Tyl i Snanzheniye Soverstikh Voo: uzheniyki Sil, No I, 1902, pp 60-65. *ACSI I-1585-C 1D 23:11014164

A Technical Maintenance System for the Automotive Tractor Mechanic, by V. Tryakin, B. Tyurkin. RUSSIAN, per, Tyl I Snabzheniye Sovetskikh Vooruzhennykh SII, No I, 1962, pp 65-71.

ACSI 1-4583-C
ID 2204014164

From Rear-Area Airfield Instruction Experience, by D. Sen'kin. RUSSIAN, per. Ty. 1 Snabzheniye Sovetskikh Vooruzhennykh SII, No I, 1962, pp 71-78.

*ACSI I-4585-C
1D 2204014164

Railroad Right-Of-Way Maintenance, by V. Loyzev, r. Shiryayou. RussiaN, per, Tyl I Snabzheniye Sovetskikh Vooruzaennykh Sil, No I, 1962, pp 78-81.

*ACSIT-4583-C 1b 2204014164

Fuel-Storage Mechanization, by V. Ryybakov. RUSSIAN, per, Tyl 1 Snabzhoniye Soverskikh Vooruzhenykh Sil, No 1, 1962, pp 81-85.

ACSI 1-4585-C
10 2204014164

Complex Use of Machinery in the Ration Supply Dump, by F. Yefromov. RUSSIAN, per, Tyl 1 Snabzheniye Sovetakikh Vooruzhennykh Sil, No I, 1962, pp 85-88.

*ACSI-458-C
ID 2204014164

Technical Information, by G. Zhureyev, F. Nikolenko, et al.
RUSSIAN, per, Tyl (Snabzheniye Soverskikh Vooruzhennykh Sil), No 1, 1962, pp 83-90.
*ACSI 1-4385-C
ID 2204014164

Certain Problems of Party Political Work in the Armed Porces in the Prewar Years, by Yu. P. Petrov, 21 pp. RUSSIAN, per, <u>Voprosy Istoril KPSS</u>, No 11, 1963, pp 57-72, JPRS 24097

Malmaining Various Types of Troop Security, RUSSIAN, per, <u>Voyennaya Mysil</u>, No 7, 1957, pp 18-28, *ACSI I-4579-A ID 2204013864

Theory of the Naval Art, by Yu. Ladinskiy, RUSSIAN, per, Yoyemaya Mysl¹, No 7, 1937, pp 29-37. *ACSI 1-1579-B 1D 2293013804

Antialrecaft Defense of Troops in Modern Operations, by A. Fedorov. RUSSIAN, per, Voyennaya Mysl¹, No 7, 1957, pp 38-50. ACSI 1-4579-C ID 2204013864

Civic Initiative in DOSAAF Activides, by F. Ruban,

5 pp. RUSSIAN, per, <u>Voyennyye Zaniya</u>, No 4, 1963, pp 18, 19, JPRS 24376

Civil Defense Training in Smolenskaya Oblast, by V. Anan'yev, 5 pp.
RUSSIAN, per, Yoyennyye Znaniya, No 4, 1903,

RUSSIAN, per, Yoyennyye Zhaniya, No 4, 1963, pp 34, 35.
JPRS 24376

DUSAAF Citizen Indoctrination, 6 pp. RUSSIAN, per, <u>Yoyennyye Znaniya</u>, No 9, 1903, pp 1, 2.

Constant Attention Toward Military Patriotic Indoctrination of Youth, by G. Sharunov, 8 pp. RUSSIAN, per, <u>Yoyennyye Zhandya</u>, No 10, 1963, pp. 3-5. 1PRS 24376 Military Uses of Plastics, by V. Vorobiyev, V. Mikuliskiy.
RUSSIAN, per, <u>Voyennyye Znaniye</u>, No 1, 1964, pp 29, 30.
AGSI -4448
ID 2204009964
525th MI Gp

DOSAAF Yacht Clubs, by O. Machinskiy, 5 pp. RUSSIAN, per, Voyennyye Znaniya, No 3, 1964, pp 39, 40, JPRS 24391

New Achievements in Metorcycle Sport, by L. Rustn, 5 pp. RUSSIAN, per, Za Rulem, No 7, 1963, pp 8, 9-JPRS 24276

USSR Geographic

Geography of the Population of Eastern Siberia, by V. V. Pokshishevskiy.
RUSSIAN, bk, Geografiya Naseleniya Vostochnoy Sibiri, Moscow, 1962, 162 pp.
ACIC

Geography of Communications in the USSR, by P. L. Sarantsev. RUSSIAN, bk, Geografiya Putey Soobscheniya SSSR, Moscow, 1962, Sec. Edition, Chapter IX, pp 97-181, ACIC

USSR Sociological

Some Aspects of Soviet Criminology, by V. Ye. Bognov, 91 pp. RUSSIAN, bk, <u>Kriminollistika</u>, Moscow, 1963, pp. 3-21; 105-118; 191-240; 619. JPRS 24222

Improvement in Public Welfare is a Law of Socialism, by P. Matislavskiy, 45 pp. RUSSIAN, per, Kommunist, No 4, Mar 1964, pp 35-45. JPRS 24082

The Book is the most Powerful Weapon of Socialist Culture, by P. Romanov, 12 pp. RUSSIAN, per, Kommunist, No 4, Mar 1964, pp 69-77. JPRS 24082

The Vatican Under a New Pope, by 1, Kravchenko, 8 pp.
RUSSIAN, per, Nauka i Religiya, No 1, 1964, pp 69-72.
JPRS 24399

USSR Description of Conditions in Thailand, by Aleksey Adzhubey, Konstantin Perevoshchikov, 8 pp. RUSSIAN, per, Ogonek, No 10, Mar 1964, pp 16, 17, JPRS 24362

Actively Conduct Atheletic Education, 5 pp. RUSSIAN, np. Pravda, 2 Mar 64. JPRS 23960

Report of Academician L. F. Il'ichev, 55 pp. RUSSIAN, per, <u>Vest Ak Nauk SSSR</u>, No 11, 1963, pp 4-46. JPRS 23980

USSR Sociological (Contd)

Discussion of Report, by V. A. Ambartsumyan, 27 pp. RUSSIAN, per, Yest Ak Nauk SSSR, No 11, 1963, pp. JPRS 23980

Resolution of the Presidium of the Academy of Sciences of the USSR, 5 pp.
RUSSIAN, per, Vest Ak Nauk SSSR, No 11, 1963, pp 68-70.
JPRS 23980

Characteristics of the Total and Harmonious Development of People Engaged in Mental Work, by M. Ya. Korneyev, 16 pp.
RUSSIAN, per, Yest Leningradskogo Univ. Seriva Ekon, Filosofii i Prava, No 4, 1963, pp 40-51.

JPRS 24160

Expedience and Goal in Social Development, by T. A. Kazakevich, 6 pp. RUSSIAN, por, <u>Vest Loningradakogo Univ</u>, Seriya Ekon, Filosofii i Prava, No 4, 1963, pp 52-63, JPRS 24161

Philosophical Aspects of Man's Biological Future, by V. V. Leonovich, 17 pp.
RUSSIAN, per, Vest Leningradskogo Univ, Seriya Ekon Filosofii i Prava, No 4, 1963, pp 74-85.

JPRS 24162

USSR Biographic

Aleksandr Yevseyevich Braumshteyn, 5 pp. RUSSIAN, per, <u>Voprosy Medit Khim</u>, No 3, 1962, pp 325-328.
JPRS 23889

Aleksey Stepanovich Pilonenko, 9 pp. RUSSIAN, per, Zhur Neorgan Khim, Vol VIII, No 6, 1963, pp 1297-1201. JPRS 24585

Pavel Trofimovich Danil¹chenko, by P. S. Meleshko, 9 pp. RUSSIAN, per, Zhur Neorgan Khim, Vol VIII, No 11, 1°63, pp 2417-2421. 3PRS 24585

Eastern Europe Economic

Let us Further Strenghten the Work of the Party in State Administration, by Rrapo Dervishi, 13 pp.
ALBANIAN, per, <u>Rruga e Partise</u>, Vol XI, No 3, 1904, pp 35-47.
JPRS 24403

Some Problems of the Labor Force in Albania, by Mizafer Anmari, 12 pp.
ALBANIAN, per, Rruga e Partise, Vol XI, No 3, 1904, pp 48-58.
JPRS 24403

Textiles in Greater Variety, by M. Kukell, 5 pp. ALBANIAN, np, Zert i Popillit, 3 Apr 1964, p 2. JPRS 24569

Eastern Europe Economic (Contd)

Let Us Raise the Work Norm up to the Level of the Demands of the Times, by Emin Sejico, 7 pp. ALBANIAN, np, Zeri i Popullit, No 81, 4 Apr 1964, pp 2, 3. JPRS 24569

Decree on Improvement of the System Governing Payment, Granting, and Interest Charging of Bank Loans, 5 pp. BULGARIAN, per, Durzhaven Vestnik, No 16, 25 Feb 1964, pp 1, 2. JPRS 23942

The Statute of the Rulgarian Poreign Trade Bank, 11 pp.
BULGARIAN, per, <u>Durzhaven Vestnik</u>, No 19, 6 Mar 1964, pp 1-3.
JPRS 24091

Regulation of the Institute for Technical Training Aids, by G. Ganev, 7 pp.
RULGARIAN, por, <u>Durzhaven Vostnik</u>, No 22, 17 Mar 1964, pp 1, 2.
JPRS 24471

The Sestrimo Cascade, by N. Panayotov, G. Kukov, et al, 13 pp.
BULGARIA, per, Elektroenergiya, Vol XV, No 1, 1964, pp 3-8.
JPRS 24558

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JPRS 24204

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JPRS 24394

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JPRS 23967

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Bastern Europe Boonomic (Contd)

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JPRS 24277

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JPRS 24203

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IPRS 24117

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JPRS 24117

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Esstern Europa Economic (Contd)

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JPRS 23886

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JPRS 24575

Directives for Budgeting and Financing Certain Expenditures Outlays of Budgetary Organizations Directed by the National Committees No 122/54 619/63 of 14 December 1905, 23 pp. CZECH, per, Yestnik Ministerstva Financi, Vol IX (1964), No 1, 2, 3 Jan 1964, pp 6-12, 1DRS 24575

Changes in the Transfer of Local to Group Telephone Networks, 22 pp. CZECII, per, Vestnik Ustredni Spravy Spoju, No 50, 12 Dec 1963, pp 326-332. JPRS 23*65

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JPRS 24364

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JPRS 24311

Bastern Europe Bosnomic (Contd)

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OTS 63-1086

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JPRS 24439

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JPRS 23967

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Reconomic Cycle in Forest Management, by F. Jorgensen. GERMAN, per Forstwissenschaftliches Centralblatt, vol LXXXI, 1962, pp 91-101. NZDIA

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GERMAN, per, Presse Informationen, 14 Feb 1964,
pp 1, II (Enclosure).
JPRS 24364

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Eastern Europe Economic (Contd)

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JPRS 24176

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Vol XI, No 2, 1964, pp 160-177.
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JPRS 24079

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JPRS 24079

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5 PRS 24153

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JPRS 24461

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HUNGARIAN, np. Nopazabadeag, 1 Mar 1964, p. 8. JPRS 24894

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HUNGARIAN, np, Nepszabadsag, 12 Apr 1964, p 7.
JPRS 24428

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JPRS 24558

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JPRS 24558

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Eastern Europe Economic (Contd)

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JPRS 24450

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JPRS 24168

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JPRS 24204

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Eastern Europe Economic (Contd)

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TPRS 24454

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JPRS 24454

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JPRS 24394

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Rastern Europe Recoomic (Contd)

Decree on the Organisation and Functions of the Ministry of the Machine Building Industry, 5 pp. RUMANIAN, per, Buletinul Oficial al Marii Adunari Nationale, No 1, 1964, pp 4, 5.
JPRS 24191

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JPRS 23886

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JPRS 24454

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Eastern Europe Economics (Contd)

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JPRS 24432

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JPRS 24394

Progress in the wood Processing Industry, by Mindi Suder, 6 pp. RUMANIAN, up. <u>Scintein</u>, 4 Feb 1964, pp 1, 2. JPRS 24147

Technical Progress at the Resita Metalurgical Combine, by Ion Potoceanu, 5 pp. RUMANIAN, np, <u>Scintela</u>, 16 Mar 1964, p 1. JPRS 24490

The General Plan of Standardization for 1964, by E. Badiu, 13 pp. RUMANIAN, per, <u>Standardizates</u>, Vol XVI, No 1, 1964, pp 1-6.
JPRS 23942

Review and Preview of Telecommunications Developments, by Grigore Marin, 7 pp. RUMANIAN, per, <u>Telecommunicati</u>, No 1, Jan, Feb 1964, pp 1-4. JPRS 24174

Transport at the Level of Present Requirements, by Dumitru Simulescu, 8 pp. RUMANIAN, per, <u>Viata Economica</u>, No 10, 6 Mar 1964, pp 1, 4.
JPRS 24169

Labor Productivity in Local Industry, by A. Popper, 5 pp. RUMANIAN, per, <u>Viata Economica</u>, No 11, 13 Mar 1964, p 5. JPRS 24168

Overall and Comprehensive Development of the National Economy, by Roman Moldovan, 10 pp. RUMANIAN, per, <u>Viata Economica</u>, No 12, 20 Mar 1964, pp 3, 4. JPRS 24191

Technical Progress in the Ferrous Metals Industry, by St. Dumitrascu, 5 pp.
RUMANIAN, per, Viata Economica, Vol II, No 12, 20 Mar 1964, p 5.
JPRS 24432

The Role of Transportation in the Foreign Trade of Cema Member Countries, 8 pp. SEKBIAN, per, Medjunarodny Transport, No 2, 1964, pp 89-91.
JPRS 24558

Eastern Europe Economics (Contd)

The Share of Domestic and Foreign Carriers in Yugoslav Foreign Trade, by S. Caric, 5 pp. SERBIAN, per, Mediunarodni Transport, No 2, 1964, pp 91-93, JPRS 24558

The Functions of the Trade Union of Agricultural Pood Processing and Tobacco Workers of Yugoslavia, 10 pp. SERBOCROATIAN, per, Glasnik, Vol XIII, No 1, 1964, pp 32-37. JPRS 24084

The 1964 Prospects for Federal Credits for Investment in Agriculture, 5 pp. SERBOCROATIAN, per, Glasnik, Vol XIII, No 1, 1964, pp 39-41.
JPRS 24084

Expansion of the Arcas of Socialized Farms, 18 pp. SERBOCKOATAN, per, Jugoslovenski Pregled, No 1, 1964, pp 7-13, JPRS 24526

Planned Economic Measures for 1964 and Changes in Some Economic Regulations, by Vladislav Boskovic, 15 pp. SERBO-CROATIAN, per, Nova Administracija, Vol XI, No 11, 12, 1963, pp 810-819. JPRS 24287

The Changed Pattern of Monetary Resources in Enterprises, by Jovan Markovic, 7 pp. SERBOCROATIAN, per, <u>Privredni Pregled</u>, Vci XIV, No 2437, 1 Pcb 1964, p 6. JPRS 24176

Problems in Selfmanagement in Economic Organizations, by Dusan Bilandzic, 23 pp. SERBOCROATIAN, per, Socijalizam, Vol VII, No 3, 1964, pp 332-352. JPRS 24191

Eastern Europe Political

Mao¹s Works Being Translated Into Albanian Review of Volume 1, by V. Koroshi, 20 pp. ALBANIAN, per, <u>Rruga e Partise</u>, No 1, 1964, pp 42-60. JPRS 24078

Albanian Party Organ Rejects Soviet Type Communist State, by Luan Omari, 13 pp. ALBANIAN, per, <u>Rruga e Partise</u>, No 1, 1964, pp 61-69. JPRS 23972

Founding of Third International in 1919 Hailed as Important Basis of International Communist Development, by Thanas Lect, 12 pp. ALBANIAN, per, Rruga e Partise, Vol XI, No 3, 1964, pp 59-69.

JPRS 24427

Albanian Theoretical Organ Reviews 40-Year Old Stalin Work Foundations of Leninism, by Sokrat Mandi, 13 pp.
ALBANIAN, per, Rruga c Partise, No 4, Apr 1964, pp 52-63.
JPRS 24598

Revolutionary Vigilance a Primary Duty of Every Patrlot, by Ivan Bucharov, 11 pp. BULGARIA; per, Novo Vreme, No 2, 1964, pp 27-34. JPRS 24323

Eastern Europe Political (Contd)

Truth and Dogmarism, by Ivan Kirilov, 16 pp. BULGARIAN, per, Novo Yreme, No 4, 1964, pp 49-62. JPRS 24417

Thoughts on the National Characteristic of Contemporary Bulgarian Literature, by Panteley Zarev, 15 pp. BULGARIAN, per, Novo Vreme, No 4, 1964, pp 74-86. JPRS 24417

Work With Bulgarian Propagandists, by Dimitur Byanov, 13 pp.
BULGARIAN, per, Novo Vreme, No 4, 1964, pp 87-96,
JPRS 24417

Bulgarian Academician Discourses on Innovation in Socialist Realist Arts, by Todor Pavlov, 6 pp. BULGARIAN, np, Otechestven Front, 29 Feb 1964. JPRS 24361

The Results of the Bulgarian State Visit to the USSR and the Joint Soviet-Bulgarian Declaration, 9 pp.
BULGARIAN, per, <u>Partien Zhivot</u>, No 4, Mar 1964, pp 3-8.
JPRS 24535

For Effective Party Control Over the Trade Unions, 8 pp., BULGARIAN, per, <u>Partien Zhiyot</u>, No 4, Mar 1964, pp 9-13. JPRS 24535

For Communist Labor Among the Workers in Nonmaterial Production, by Petur Radev, 10 pp. BULGARIAN, per, <u>Partien / hivot</u>, No. 4, Mar 1964 pp 14-20.
JPRS 24535

Increasing Worker Participation in the Activities of the People's Councils, by Panayot Gindev, 32 pp. BULGARIAN, per, <u>Pravna Misul</u>, No 6, 1963, pp 93-110. JPRS 24238

Agreement on Inter-Republican Cooperation in Economy, Education, and Celture, 8 pp. GROA FIAN, per, Komunist, 6 Feb 1964, pp 1, 6. JPRS 24323

Law on the Use of Airports, 14 pp. CROA (IAN, per, <u>Sluzbent List SFRJ</u>, No 12, 18 Mar 1964, pp 245-249. JPRS 24258

Socialist Society and the Class Struggle, by Pavel Machonin, 16 pp. CZECH, per, Nova Mys!, No 10, 1963, pp 1164-1173. JPRS 24429

The Development of Leninism in Philosophy, by Josef Ruml, 17 pp. CZECII, per, Nova Mysl, No 1, 1964, pp 9-18. JPRS 23973

Novotny Speaks to Czechoslovakia Architects Congress in Prague, by A. Novotny, 9 pp. CZECII, np. Rude Prayo, 26 Mar 1964, JPRS 24361

Mission and State of Cultural Periodicals, 22 pp. CZECH, np. Rude Pravo, 3 Apr 1964, pp 3, 4. JPRS 24361

The Party and the People, 5 pp. CZECH, per, Zivot Strany, No 4, Feb 1964, pp 195-197, JPRS 24429

Eastern Europe Political (Contd)

Lazitch Describes Chinese Penetration of Communist Parties Everywhere, by Branko Lazitch, 8 pp. WEST-GERMAN, np. Neue Zuercher Zeitung, 9 Feb 1964, p 4: 14 Feb 1964, p 3. JPRS 23972

East German Communists Inflitrate West German Trade Unions, 8 pp. WEST-GERMAN, per, <u>SBZ Archiv</u>, No 1, 1964, pp 36-39. JPRS 24367

East Germans Revive Polentic With Austrian Communist Fischer Kurt Krueger on Production Man and Revolution, by Kurt Krueger, 15 pp. GERMAN, np, Sonntag, No 16, 19 Apr 1964, pp 12-15.

JPRS 24626

Here and There Across the Zone, by Joseph Wechsberg, 28 pp.
WEST-GERMAN, np. Die Welt, 7, 9, 11, 13, 14, 16, 20 Mar 1964.
JPRS 24429

Problems of Party Work, by Micczysław Marzec, 21 pp. POLISI, per, Nowe Drog!, No 4 (179), 1964, pp 92-110. JPRS 24535

The State Committee for Culture and Art, by Ion Moraru, 8 pp.
RUMANIAN, np, Comemporanul, 13 Mar 1964, pp 1, 7.
JPRS 24361

Problems of the Development of Socialist Democracy in Rumania During the Present Period, by Dumiteru I, Mazilu, 16 pp. RUMANIAN, per, <u>Institia Noua</u>, Vol XX, No 2, 1964, pp 3-17. JPRS 24429

Observations on the Specific Nature of Rumantan Literary C. (tictam, by M. Novicov, 7 pp. RUMANIAN, mp. Laccatarul, Vol VII, No 7 (140), 28 Mar 1964, p 11. JPRS 24567

The Management of the Economy by the Party, by Constantin Ionescu, 13 pp. RUMANIAN, per, Lapta da Clasa, No 12, 1963, TDBS 23073

Communist Official's Speech at Opening of Czechoslovak Glass Factory, by A. Dubcek, 8 pp. RUSSIAN, np. <u>Pravda</u>, 27 Mar 1964. JPRS 24361

Bulgarian Communist Party Condemns Chinese Dissidence Text of the 21 March 1964 Central Committee Resolution, 7 pp. RUSSIAN, np. <u>Pravda</u>, 7 Apr 1964, p 3. JPRS 24427

Current Themes on the Eve of the VIII Congress, by VIajko Begovic, 9 pp. SERBIAN, per, Komunist, 2 Apr 1964, p 3. JPRS 24361

The New Role of the League of Communists is the Fruit of the Development of Self-Management, by Mito Hadzi Vasilev, 10 pp. SERBIAN, per, Komunist, 2 Apr 1904, p 4. JPRS 24361

Coexistence and Progressive Social Transformation, by Kiro Hadji Vasiiev, 16 pp. SERBIAN, per, Socijalizam, Vol VII, No 2, 1964, pp 189-202. JPRS 23862

Rastern Europe Political (Contd)

Social Criticism in Socialism, by Svetozar Stojanovic, 16 pp. SERBOCROATIAN, per, Gledista, No 2, 1964, pp 181-199. JPRS 24535

Currency of Marxist Thought, by Andrija Kresic, 11 pp.
SERBOCROATIAN, per, Gledista, No 3, 1964, pp 371-380.
JPRS 24535

Whom is Youth Criticizing, by Radoje Stefanovic, 7 pp. SERBOCROATIAN, per, Gledista, No 3, 1964, pp 417-424. JPRS 24535

Current Themes Before VIII Congress the Working Collective, by Viajko Begovic, 8 pp. SERBOCROATIAN, per, Komunist, 9 Apr 1964, p 3. JPRS 24567

Vladimir Minac Discusses Modern Literature, by Vladimir Minac, 9 pp. SLOVAK, per, <u>Kulturny Ziyot</u>, No 9, 29 Feb 1964, p 3. JPRS 24535

Literature Also Needs a Firm Theoretical Foundation, by Ondrej Gries, 8 pp. SLOVAK, np. <u>Pravda</u>, Vol XLIV, No 344A, 15 Dec 1963, p 2. JPRS 24238

The Journal Day on Proletarian Literature, by Anton Markus, 5 pp. SLOVAK, np, <u>Pravda</u>, 25 Mar 1964, p 3. JPRS 24201

How the Slovak National Council Was Created, by Jozef Hagara, 10 pp. SLOVAK, per, <u>Protifasisticky Bolovnik</u>, No 12, 1963, pp 2, 3.
JPRS 24567

Eastern Europe Military

For More Effective Political Training, by Vladimir Meisner, 15 pp. GZECH, per, <u>Obrance Vlasti</u>, No 10, 10 Mar 1964. JPRS 24206

Party Work in the Armed Forces, by Vaclav Prchilk, 11 pp. CZECH, per, Zivot Strany, No 24, Dec 1963, pp 14:2-14:56.
JPRS 24232

Protective Training, 17 pp. GERMAN, rpt, <u>Handbuch fuer Mot-Schutzen</u>, 1963, pp 405-436. A CSI 1-3773 ID 2253788 525th MI Gp

Motor-Vehicle Operation Training, 16 pp. GFRMAN, rpt, Handbuch fuer Mot-Schutzen, Berlin, 1963, pp 480-50f. ACSI 1-4451 ID 1521948363

Eastern Europe Military (Contd)

Decree on the Protection of the GDR State Eorders, 6 pp. GRRMAN, per, Gesetzhlatt der Deutschen Demokratischen Republik, No 34, 21 Apr 1964, pp 235, 256. JPRS 24570

Directive Concerning Control in the Border Areas and Territorial Waters of the German Democratic Republic, 15 pp. GERMAN, por, Gesetzblatt der Deutschen Demokratischen Republik, No 34, 21 Apr 1964, pp 257-262. JPRS 24570

A Discussion of Some Technical and Scientific Methods Used in Criminal Investigations in Rumania, by Ioan I. Cora, 9 pp. RUMANIAN, per, Justitia Noua, Feb 1964, pp 38-46.

JPRS 24570

In Reference to Statistics of Fires Occurring in Villages, by Ilie Opresan, 5 pp. RUMANIAN, per, Paza Contra Incendiflor, Vol XVI, No 3 (175), Mar 1964, pp 12, 13. JPRS 24570

Eastern Europe Sociological

Let Us Strengthen Criticism and Seli Criticism, by Gjika Trajant, Munir Kokona, 5 pp. ALBANIAN, np. <u>Bashkind</u>, 26 Mar 1964, p 2. JPRS 24509

For a Higher Principled Criticism, by Mark Gurakuqi, 8 pp. ALBANIAN, op. <u>Drita</u>, 15 Mar 1964, pp 2, 3. JPRS 24569

The Full Utilization of Working Time a Great Factor in Increasing Production, 5 pp. ALBANIAN, np. <u>zeri P</u>opullit, No 76, 29

J PRS 24403

Directive on Student Admissions to Higher Educational Institutions, by G. Ganev, 17 pp. BULGARIAN, per, <u>Durzhaven Vestnik</u>, No 18, Mar 1964, pp 2-5. JPRS 24025

Ministry of Public Education Regulation Governing Compulsory Elementary Education, 6 pp. BULGARIAN, per, <u>Durziaven Vestnik</u>, No 20, 10 Mar 1904, pp 1, 2.

JPRS 24188

Regulation Governing the Operation of Labor Producer Cooperatives for Disabled Persons and of Special Enterprises for Rehabilitated Persons Under the People's Councils, by K. Ignatov, 8 pp. BULGARIAN, per, Durzhaven Vestnik, 17 Apr 1964, pp. 1, 2, JPRS 25432

Some Problems in Feeding the Bulgarian People, by T. Fashey, M. Demireva, et al, 19 pp. BULGARIAN, per, <u>Ikonomicheska Misul</u>, No 2, 1964, pp 39-51, JPRS 24400

Bastern Europe Socielogical (Contd)

Concerning Strict and Efficient Control of State Social Security Funds, by K. Ribarski, 7 pp. BULGARIAN, np, <u>Trud</u>, No 7, 9 Jan 1964, pp 1, 2, 3. JPRS 25911

The Effect of Basic Socio Economic Factors on the Bulgarian Birth Rate, by Minko Minkov, 9 pp. BULGARIAN, per, Trud i Tseni, No 2, 1964, pp 13-22.
JPRS 24306

April 7 the Celebration of Public Health Workers Day, 5 pp.
BULGARIAN, np. Zdraven Front, No 13,
27 Mar 1964, p 2.
JPRS 24532

Decree on Promulgation of the Law Regarding Amendments and Additions to the Law on Executing Criminal Penalties, 13 pp. GROATIAN, por, <u>Sluzbent List Socijalisticke</u> Federativne Republike Jugoslavije, No 7, 12 Feb 1964, pp 181-184.

Decree on Promulgation of the Law on Pardons, 5 pp. CROATIAN, per, Sluzbent List Socijalisticke Federativne Republike Jugoslavije, No 7, 12 Feb 1964, pp 184, 185.

JPRS 24188

Abortion Rate in Czechoslovakia During the Period 1958-1962, by Vladimir Srb, Milan Kucera, 28 pp. GZEGH, per, <u>Demografic</u>, Vol V, No 4, Oct 1963, pp 289-306. JPRS 24306

The Housing Problem and Housing Conditions, by Zdenek Urbanek, 14 pp. CZECH, per, Nova Mysl, No 3, 1964, pp 264-274, JPRS 24258

Rents and Housing, 5 pp. CZECII, per, <u>Nova Mysl</u>, No 3, 1964, pp 380-383, JPRS 24258

The Proportionality of Social Processes, by Rainer Thiel 20 nn.

Vol XII, No 2, 1964, pp 151-175.

JPRS 24217

Pragmatic Analysis as a Theory of Epistemological Discipline, by Georg Klaus, 15 pp. GERMAN, per, <u>Deutsche Zeitschrift fuer Philosophie</u>, Vol XII, No 2, 1964, pp 176-190. JPRS 24216

Handwriting Analysis and the Code of Criminal Procedure, 10 pp. GERMAN, per, <u>Kriminalistik</u>, Vol XVIII, No 3, 1964, pp 125-128. JPRS 24196

Twentleth Anniversary of Education in People's Poland, by Waclaw Tudodziecki, 18 pp. POLISH, per, Nowe Drogi, No 4 (179), Apr 1904, pp 151-167.

JPRS 24584

The Protection of the Health of Workers in the Mining Industry—An Important Objective, 14 pp. RUMANIAN, up. Muscitorul Sanitar, Vol XV, No 3 (711), 18 Jan 1904, p 3. JPRS 23911

Rastern Europe Sociological (Contd)

Session of the Collegium of the Ministry of Health and Social Welfare, 7 pp. RUMANIAN, np. Muncitorul Sanitar, Vol XV, No 4 (712), 25 Jan 1964, p 3. JPRS 23911

Plenum of the Central Committee of the Red Cross 5 pp. RUMANIAN, np. Muncitorul Sanitar, Vol XV, No 4 (712), 25 Jan 1964, p 4. JPRS 23911

The Present Stage in the Program to Eliminate Diphtheria in Rumania, by Sanda Bibert Moroianu, 5 pp. RUMANIAN, np. Muncitorul Sanitar, Vol XV, No 6 (714), 8 Feb 1964, pp 1, 3. JPRS 24240

Situation in Health Protection in Bucharest Analyzed in People's Council Session, 7 pp.
RUMANIAN, np., Muncitorul Sanitar, 15 Feb 1964, p 3, JPRS 24410

Progress in the Fight Against Tuberculosis, by M. Missir, 5 pp. RUMANIAN, np. Munckorul Sanitar, No 13, 28 Mar 1964, p 4. JPRS 24584

Yugoslav Law on the Execution of Griminal Penalities, 54 pp. SERBIAN, per, Sinzbent List SFRJ, No 9, 26 Feb 1904, pp 205-219. JPRS 24272

Reflections on Certain Problems in the Association of Citizens, by Miodrag Zecevic, 15 pp. SER BOCROATIAN, per, Narodni Odbor, Vol XVI, No 12, 1963, pp 609-621.

JPRS 23911

Agreement on Social Insurance for Islamic Church Personnel, 14 pp, SERBO-GROATIAN, per, <u>Stuzbent List SFRJ</u>, Vol XX, NO 11, 1964, pp 238-242. JPRS 24240

Role of Health Education in Protection of Nations-

SERBOGROA HAN, per, <u>Socijalna i Zdravstvena</u> <u>Politika</u>, No 1, 2, 1964, pp 32-37. <u>JPRS</u> 24532

Professional Training of Probationers Physicians, Dentists, Pharameters, by Pavie Delevic, 5 pp. SERBOCROATIAN, per, <u>Socijalna i Zdravstvena Politika</u>, No 1, 2, 1964, pp 59-63, JPRS 24532

Fifteen Years of the Ploneer Organization, by Jozef Hudcovic, 6 pp. SLOVAK, np. Ucitelske Noving, Vol XIII, No 51, 52, 19 Dec 1903, pp 1, 3, JPRS 24416

Western Europe Economic

French Foreign Aid: Wasted or Productive?, by Gilles Martinet, 5 pp. FRENCH, np. France Observateur, 9 Apr 1964, pp 7, 8. JPRS 24402

Western Europe Economic (Contd)

The Trend Toward Labor Unity in France — A Belgian Leftist Socialist Analysis, 5 pp. FRENCH, np. <u>La Gauche</u>, 20 Mar 1964, p 5. JPRS 24307

Regulation Concerning the Gradual Establishment of a Common Organisation of the Market for Beef, Il pp. FRENCH, per, Official Gazette, No 34, 27 Feb 1964, Encl No 1 to Desp A-722, USEC, Brussels, Dept of State 4734072264

Budget Reform Bill Enacted, 6 pp. ITALIAN, per, Gazzetta Ufficiale della Repubblica, No 61, 9 Mar 1964, Law No 62 of I Mar 1964, Encl No 1 to Desp A-1293, AmEmbassy, Rome. Dept of State

100,000 Meters of Rallway Tracks and 1000 Workers at Oslo East Starton, 1000 Tons of Goods Handled Daily, 6 pp.
NORWEGIAN, np, Aftenposion, 1 Feb 1964, OUSARMA, Norway, 1D 2872003464 (DIA)

Western Europe Political

Jespersen and Larsen Debate Possibilities for Communist Party-SSP Rapprochement, by Knud Jespersen, Aksel Larsen, 6 pp. DANISH, up, Land og Fold, 2 Apr 1964, pp 1, 5, JPRS 24401

Communists Discuss Netherlands Constitution, by A. De Meester, 6 pp.
DUTCH, per, Politick en Cultuur, No 3, 1964, pp 97-101.
JPRS 24462

Paul De Groot[†]s Opening Speech, 12 pp. DUTCH, np, <u>De Waarheid</u>, 28 Mar 1964, p 5. JPRS 24259

Henk Hoekstra's Speech, 11 pp. DUTCH, np. <u>De Waarheid</u>, 31 Mar 1964, p 5. JPRS 24259

Hockstra's Reply to the Congress Discussion, 5 pp. DUTCH, np, De Waarheid, 2 Apr 1964, p 4. JPRS 24259

Communists Press for French Labor Unity, by Victor Michaul, 11 pp. FRENCH, per, <u>Cahiers du Communisme</u>, Mar 1964, pp 3-12. JPRS 24401

The Leadership Crisis of the French Communist Party -- An Anticommunist Analysis, by Claude Harmel, 8 pp. FRENCH, per, Est et Quest, No 317, 16-31 Mar 1964, pp 21-23. JPRS 24336

Text of Draft Resolution of Swiss Communist Party National Conference, 6 pp. FRENCII, per, <u>l'Etincelle</u>, No 1, 1964, pp. --8. JPRS 24192

Western Europe Political (Contd)

Bulliard Editorial on Communism and Roman Catholicism, by Gerard Bulliard, 6 pp. FRENCH, per, <u>L'Etincelle</u>, No 2, 1964, pp 3-6. JPRS 24192

The Swiss Political Situation Analyzed by Dissident Communist Editor Bulliard, by Gerard Bulliard, 5 pp. FRENCH, per, <u>l'Etincelle</u>, No 3, 1964, pp 1-4. JPRS 24235

Spain and Africa, by Rene Pelissier, 9 pp. PRENCH, per, France Eurafeique, Vol XV, No 147, Doc 1963, pp 10-14. JPRS 24314

PCF Secretary Roland Leroy's Speech, by Roland Leroy, 8 pp.
FRENCH, np, Franco Nouvello, 11-17 March 1964, pp 6, 7.
JPRS 23907

French Communist Chides Chinese for Dialectic Errors Three Articles by Charles Haroche, by Charles Haroche, 17 pp. FRENCH, np. <u>France Nouvelle</u>, No 964, 8-14 Apr 1964, p 17. JPRS 24598

French Communist Party Proposals on Immigrant Labor Problem, by Georges Marchals, 18 pp. FRENCH, np. <u>France Nouvelle</u>, No 906, 22-28 Apr 1904, pp 15-18. JPRS 24531

The frend foward Labor Unity in France French CP Statement on Ideological Problems and Labor Unity, 17 pp. FRENCH, np. Plumanite, 10-20 Mar 1964, pp 1-5. JPRS 24172

The Trend Toward Lahor Unite in France French Communist Party Statement on Ideological Problems and Lahor Unity, 13 pp. FRENCH, np. <u>PHomanite</u>, 21-20 May 1964, pp 1-5. JPRS 24529

Guyot Answers Chinese 31 March Attack on French Communist Party, by Raymond Guyot, 5 pp. FRENCH, np. L'Ithmeanite, 14 Apr 1964, pp 1, 6, JPRS 24829

Fronskyites Criticize French Communist Party Preparations for 17 Congress, by R. Merlin, 7 pp. FRENCH, per, Planernationale, No 12, 20 Mar 1964, 9 3. JPRS 24367

French Book on Est-West Relations Reviewed Maurice Duverger Introduction a la Politique, by Maurice Combes, 5 pp.
FRENCH, np. <u>Introduction a la Politique</u>, No 190, 11 Apr 1904, p 10.
JPRS 24509

Belgian Catholic Daily Analyzes Effect of Rift on World Communism, 5 pp. FRENCH, n; , <u>La Libre Belgique</u>, 7 Apr. 1964, p. 1. JPRS 24548

Organization and Activities of the Portuguese Left, by Manuel de Lucena, 9 pp. FRENCH, per, <u>Partisans</u>, No 14, Feb, Mar 1964, pp 25-32, JPRS 24235

Western Europe Political (Contd)

Adzhubey Mects French Press, 7 April, 5 pp. FRENCH, np. Tribune Socialiste, No 190, 11 April 1964, \overline{p} 6. JPRS 24509

Criticizes Preparations for 17th PCF Congress, 5 pp. FRENCH, per, <u>Unir Pour le Socialisme</u>, No 137, Apr 1°64, p 2. JPRS 24509

Accuses Waldeck Rochet of Following in Steps of Khrushchev, Stalin, and Thorez, 5 pp. FRENCII, per, Unir pour le Socialisme, No 137, Apr 1964, p 3.

JPRS 24509

Further Warnings About Communist Student Union Union of Communist Students, 9 pp. FRENCH, per, <u>Unic Pour le Socialisme</u>, No 137, Apr 1904, pp 7, 8. JPRS 24509

Blasts Guyot Report and Acti in of Central Committee, 25-26 March, 5 pp. FRENCH, per, <u>Unit pour le Socialisme</u>, No 137, Apr 1964, p 16. JPRS 24509

Says Leaders Follow in Steps of Stalin and Khrushchev, by Arricux, 6 pp. FRENCH, per, La Voie Communiste, No 43, Apr 1904, pp 8, 9, JPRS 24548

Italian Dissidents Organize, Issue New Monthly, Nuova Unita, 6 pp. FRENCH, per La Voix du Peuple, Vol II, No 12, 20 Mar 1904, pp 8, 9. JPRS 24192

Dissident Belgian Criticism of Congress Discussion Theses, 6 pp. FIGNCII, per, La Voix du Peuple, No 13, 27 Mar 1964, pp 2, 3. JPRS 24259

Belgian Dissidents Protest Galurov Charge of Chinese Racism, by Arnold Hauwaert, 6 pp. FRENCH per, <u>La Voix du Peuple</u>, To Apr. 1964, p. 14. JPRS 24509

Stuttgart Colomunist Discusses Khrushchev's Hungarian Visit, by Carl Gustav Strochm, 5 pp. GERMAN, np. Christ und Weh, No 14, 3 Apr. 1904, pp. 1, 2, JPRS 24462

Zuerich Newsman Comments on Suslov Report, by Ernst Kux, 5 pp. GERMAN, np, <u>Neue Zuercher Zeitung</u>, No 93, 5 Apr 1964, p 2. JPRS 24462

Austrian East European Analyst Says Split is Inevitable, by Paul Lendvai, 5 pp. GERMAN, np. <u>Die Presse</u>, 2 Apr 1904, p 3. JPRS 24548

Austrian Dissidents Disclose Undemocratic Practices of World Peace Council, 9 pp. GERMAN, pcr, <u>Rote Fabine</u>, No 1(5), 4 Jan 1964, pp 1-7, JPRS 24307

Western Europe Political (Contd)

Scholl on Problems of the Fight for Peace, by Friedrich Scholl, 6 pp. CERMAN, per, Weg und Ziel, No 2, 1964, pp 81-88, JPRS 24307

French Delegate Guy Ducolone's Speech, by Guy Ducolone, 5 pp. GERMAN, np, Zeitung vum Letzeburger Vollek, 10 Apr 1964, p 3. JPRS 24598

Text of Luxemburg Communist Party Declaration of Principle on Luxemburg's Own Way to Socialism in Peace, Freedom, Democracy, and National Independence, 5 pp. GERMAN, np. Zeitung vum Letzeburger Vollek, 11 Apr 1964, pp 5, 6. JPRS 24598

Post-Split Reorganization of PSI Leadership and Pelicy, by Guelfo Zaccarla, 6 pp. ITALIAN, per, <u>Corrispondenza Socialista</u>, No 2, 1964, pp 62-64, JPRS 23972

Anti-Communist Socialists Deride Communist Unity Policy, by Ruggiero Guarini, 6 pp. ITALIAN, per, Corrispondenza Socialista, No 2, 1964, pp 65-67. JPRS 23972

PCI Statement on Political Parties and Democracy, 12 pp. ITALIAN, per, <u>Gritter Marxista</u>, No 1, Jan. Feb 1964, pp 3-10. JPRS 24472

Are and Settembrini Discuss PCI-PSI Relations With Reichlin, by Giuseppe Are, Domenico Settembrini, et al, 12 pp. ITALIAN, per, <u>Critica Marxista</u>, No 1, Jan. Feb 1964, pp 162-181. JPRS 24172

hallan Writer Discusses Progress of Cuban Revolution, by Gianni Corbi, 52 pp. 1f ALIAN, np, <u>L'Espresso</u>, 20 Jan., pp 6, 7; 9 Feb, pp 14, 15; 16 Feb, pp 16, 17; 23 Feb, p 17, 1964. JPRS 24080

PSIUP Organ Analyzes Communist Organization Plans, by Darte Valori, 8 pp. ITALIAN, per, <u>Mondo Nuovo</u>, No o, 22 Mar 1964, pp 3, 4, JPRS 24235

Antonio Lettleri on Frade Unions and the Common Market, by Antonio Lettleri, 14 pp. 1FALIAN,per, <u>Mondo Nuovo</u>, 29 Mar 1904, p.5. JPRS 24620

Italian Communistr Discuss How to Attract Intellectuals, by Rossana Rossanda, 8 pp. ITALIAN, np. <u>Binascita</u>, 14 Mar 1964, pp 25, 26, JPRS 24078

Longo Calls for End to Moror Nenai Coalition, by Luigi Longo, 6 pp. 11ALIAN, np, Rinascita, No 12, 28 Mar 1904, pp 1, 2, JPRS 24307

Rome Weekly Analyzes Causes of Conflict, Comments on Rumanians! Visit to Petping, by Giorgio Gironi, 5 pp. ITALIAN, per, 14 manua, Vol II, No 15, 22 Mar 1964, p. 2. JPRS 24250

Western Europe Political (Contd)

Togliatti, in Major Speech in Bologna, Says PCI Unity Policy Could Be Basis for New Majority, 7 pp. ITALIAN, np. <u>Unita</u>, 9 Mar 1964, pp 1, 6. JPRS 23972

The French Communist Student UEC Congress 5-8 March 1964, by Maria A. Macciocchi, 6 pp. ITALIAN, np, <u>i'Unita</u>, 20 Mar 1964, p 3. JPRS 20478

Togliatti Expounds PCI Line on International Communist Dispute Text of 22 Apr 1964 Report to PCI Central Committee, by Palmiro Togliatti, 32 pp. ITALIAN, np. 1 Unita, 23 Apr 1964, pp 1, 3-5. JPRS 24476

Central Committee Discusses and Approves Togliani Report, 13 pp. ITALIAN, np. <u>PUnita</u>, 24 Apr 1964, pp 1, 10. JPRS 24476

1963 Statutes of the Portuguese Communist Party, 11 pp. PORTUGUESE, pamphlet.
JPRS 23972

Spanish Communist Party Chief Carrillo Discusses Conditions in Spain, by Santiago Carrillo, 5 pp. RUSSIAN, np. <u>Pravda</u>, 26 Apr 1964, p 5. JPRS 24626

FLP Aims and Activities Described, 8 pp. SPANISH, rpt, Fronto Obcero, 10 pp. JPRS 24235

Spanish Class Structure Explained From Marxist Viewpoint, 7 pp. SPANISH, rpt, Frente Obrero, No 3, Nov 1963, pp 2, 3, JPRS 24235

Hits Anti Communism of Anti-Franco Exiles, by C. P. 6 pp. SPANISH, per, <u>Munda Obrero</u>, 1-15 Jan 1904, pp 3, 4, JPRS 23907

Western Europe Mineary

Total National Defense Health Service in the Medical School at Turku University, by E. Mustakalifo, 7 pp. FINNISH, per, Sotilaslaske Fieteellinen Aikakauslehti, lielsinki, No 3, 1963, pp 57-61. (Call No Uncaratoged, Eng Tr.) Army Map Service

Comments on Medical Care During the Kainuu Maneuvers, by I. S. Salonen, 6 pp. FINNISH, per, Sotilastaake Tieteellinen Aikakauslehte, Helsinki, No 3, 1963, pp 63-67. (Call No Uncaratoged, Eng Tr) Army Man Service

Visit to the Pierrelatte Isotope Separation Plant, by Nicholas Vichney, 9 pp. FRENCH, np. <u>Le Monde</u>, 28 March 1964, pp 1, 8; 29, 30 Mar, p 10. JPRS 24241

Medical Service in the Swiss Army, by Kaser, 10 pp. FRENCH, per Revue Internationale, Paris, No. 7, 8, 1963, pp. 455-463. (Call No Uncatalog | Eng. 1r.) Army Map Service

Western Europe Military (Contd)

Army Regulations - Training for Firing From an Armored Personnel Carrier, 75 pp. GBRMAN, rpt, Schlessaugbildung fuor das Schlesson vom Schutzenpanzer mit Gewehr und MG, 30 Nov 1961, Army Regulations 236/1.
ACSI I-4612
ID 2204014464

Soldiers to Have Better Equipment: Lighter: Warmer Healtheir, 7 pp. NORWEGIAN, np. Aftenposten, 9 Jan 1964, OUSARMA, Norway. ID 2872003664 (DIA)

Management, Personnel and Research Covering Military Medical Service in West Germany, France, and Great Britain, by Evert E. Son Schildt, Il pp. SWEDISI, per, <u>Tidskrift i Militar Halsovard</u>, Vol LXXXVII, No 1, 1962, pp 13-25.
ACSI 1-4407
1D 220-4009164

Western Europe Sociological

Finnish Editor Criticized as Anti-Soviet, by Boris Leontlyev, 5 pp. RUSSIAN, np. <u>Literaturnaya Gazeta</u>, 26 Mar 1964, p. 4. JPRS 24409

Announcement From the Sanitation Office, 22 pp. ITALIAN, rpt, Notiziario dell'Anninistrazione Sanitaria, Rome, 1963, 16 pp. (Call No Uncataloged, Eng Tr) Army Map Service

Anti Communist Says No Real Disagreement Between Garandy and Wichev on Religion, by Claude Harmel, opp. FRENCH, per, <u>Est & Quest</u>, No 318, 1-15 Apr 1964, pp 1-4. JPPS 24548

Africa Economic

The Regional Fransport Association of the Province of Cap Bon, 10 pp. FRENCH, per, <u>L'Action</u>, 26 Feb 1964, p. 3. JPRS 24171

Public Works and Transportation Projects in the Ivory Coam, by Alcide Kacou, 12 pp. FRENCII, per, Afrique Magazine, No 27, Dec 1903, pp. 30-33.

JPRS 24407

Collective Bargaining Agreements in the Coago, by T. Nzau, 8 pp.

FRENCII, per, Etudes Congolarser, Vol V, No 10, Dec 1903, pp. 53-60.

JPRS 24495

Internal and External Communications, by Fugera Lechal, 5 pp. FRENCH, per, Europe France Outremer, No 405, Oct 1963, pp. 31-34. JPRS 2446

Africa <u>Boonomic</u> (Contd)

Transportation Development and Water Supply Projects in the Malagasy Republic, 16 pp. PRENCH, per, <u>Burope-France Outremer</u>, No 405, Ct 1963, pp 59, 60.

JPRS 24467

Ethiopia's Second Five Year Development Plan, 35 pp. FRENCH, per, <u>Industries et Travaux d'Outremer</u>, Vol XII, No 123, Feb 1964, pp 192-203. JPRS 24467

The Economic Situation in Kabylia, 10 pp. FRENCH, np. Le Peuple, 1, 3, 4, 6, 7 Feb 1964. JPRS 24171

FLN Congress Preparatory Committee Report on the Economic and Social Situations, 16 pp. FRENCH, np. 1:e Peuple, 6 Apr 1964, pp 8, 9, JPRS 24218

Development of the Bou Regreg Estuary, 6 pp. FRENCH, per, Les Phares, No 132, 29 Feb 1964, pp 10, 11. JPRS 24171

Traditional Land Owernship Systems in Africa, by Denise Pauline, 23 pp.
FRENCH, per, <u>Presence Africaine</u>, No 48, 4th Quarter 1963, pp 109–132.
JPR\$ 24467

Kural Development, by Michel R. Ahyi, 6 pp. FRENCH, np. Presence Curetlenne, Vol V, No 92, 15 Mar 1964, p 3. JPRS 24467

Africa Politcai

The Question of the Single Party in Algeria, 5 pp. FEBNCH, per, Le Communiste, Dec 1903, Jan 1904, pp. 12, 14, JPRS 24171

A Dangerous Illusion Cartierism, by G. Blardone, 9 pp. FRENCH, per, <u>Croissance des Jeunes Nations</u>, No 32, Apr 1964, pp 4-7. JPRS 24 67

1964 Fides Program in the Comoro Archipelago and French Somatiland, opp. FRENCH, per, Industries et Travaux d'Outremer, Vol XII, No 123, Feb 1964, pp 224, 227. JPRS 24467

A Marxist Analysis of the Single Party System in Africa, by Antoine Madimba, 14 pp. FRENCH, per, <u>Partisans</u>, No 14, Feb, Mar 1964, pp 114-126. JPRS 24235

The Party Statutes, 8 pp. FRENCH, np. <u>Le Peuple</u>, 6 Apr. 1964, pp. 9, 10. JPRS 24218

Africa Intunidated or Partice ship, by J. Ki-Zerbo, 15 pp. FRENCH, per, Presence Africance, No. 48, 4th Quarter, 1963, pp. 32-48. JPRS 2446.

Africa Military

÷

Post Independence Organization of the Senegalese Army, by Jean Aifred Diallo, 6 pp. FRENCH, per, Let Vie Africaine, No 43, Jan 1964, pp 62, 63.

JPRS 24467

Africa Ceographic

Five and One Half Million Inhabitants in 1960 Seven Million in 1970 in the Malagasy Republic, by J. Ravoahangy-Andrianavatona, 5 pp. FRENCH, per, Europe-France Outremer, No 405, Oct 1903, pp 12-14. JPRS 24467

Africa Sociological

Higher Education in Morocco, 5 pp. FRENCH, per, Africa, Vol XI, No 30, Jan-Feb 1901, pp 71, 72. JPRS 24467

Supplemental Data on Higher Education in the Congo, by J. Debasse, B. Malter, 31 pp. FRENCH, per, Etudes Congolatics, Vol V, No 10, Dec 1903, pp. 1-36, JPRS 24495

A Liberal Socialism for the Malagasy Ropublic, by Jacques Rahemamanjara, 6 pp. FRENCH, per, <u>Europe-France Outremer</u>, No 415, Oct 1963, pp 25-27, JPRS 24467

Middle Fast Economic

Syria: Housing and Municipal Construction in the Near East, by Wolf Donner, 12 pp. GERMAN, per, Monatsheft fuer Neuzeltlichen, Wohningsbau, No 1, 1964, pp 29; 31; 32; 34-37; 40; 42. (Call No NA7100 N48-1964, No 1, Eng Tr) Army Map Service

Middle East Political

Constitutional Declaration, 23 pp. ARABIC, rpt, 23 Mar 1964, Encl No I to Desp A-726, AmEmbassy, Carro. Dept of State

Middle Bast Political (Contd)

Republican Resolution on the Organization of the Civil Servant Body, by 'Abd Allah Al-Sallal, 6 pp. ARABIC, np. Al-Akhhar, 8 Mar 1964, pp 1, 4, 3. JPRS 24156

Law Concerning Ratification of the Convention Between the Turkish Republic and the Greek Government on Residence, Trade and Navigation, 14 pp. FRENCH, per, Official Gazette, No 1748, 15 Mar 1931, Encl No I to Desp A-805, AmEmbassy, Ankara, Dept of State

Present Day Turkey A Turkish Communist View, by Yakub Demir, 23 pp. GREEK, per, Elliniki Aristera, No 6, Jan 1964, pp 41-49. JPRS 23966

Middle East Sociological

The Dead Sea Scripture, by Theodor II, Gaster, HEBREW, rpt, 1956, 420 pp. Doubleday

Far East Economic

People's Communes Making Progress, by I'ao Chu, 26 pp. CHINESE, por, <u>Hung-ch'l</u>, No 4, 26 Feb 1964, pp 1-12. JPRS 24292

Carry Out Well the Ideological Work of Workshops in Industrial Enterprises, by Li Yeh, 5 pp. CHINESE, per, (<u>Jung-ch³i</u>, No 5, 17 Mar 1964, pp 21-23. JPRS 24545

Intensify the Research in the Economic Results of Agro-Technical Reform, by Yang Chan, & pp. CHINESE, per, <u>Hung-ch⁴1</u>, No 5, 17 Mar 1964, pp 34-38.
<u>JPRS</u> 24545

Increased Material and Financial Assistance From the State to Promote Agricultural Development, by Kim Chun-jom, 10 pp. KOREAN, per, <u>Chaejong Kumyung</u>, No 2, 1964, pp 2-7. JPRS 24310

Scientific Technique on Increasing Rice Yield Over 500 Kilograms per Chongho, by Pang Ch⁴H-song, 9 pp. KOREAN, np. Nodon, Sinman, 15 March 1964, pp. 2, 3, JPRS 24310

Coal Production, 5 pp. KOREAN, per, <u>Sokt¹an Kongo</u>p, No 2, 1964, pp 2-5. JPRS 24310

Economic Geography of the Mongolian People's Republic, by Ivan Kharitonovich Ovdiyenko, 104 pp. RUSSIAN, bk, Mongol'skaya Narodnaya Respublika, Moscow, 1903, pp 1-152. JPRS 24215 Experience in Defining the Main Economic Zones of the Mongolian People's Republic, by P. M. Alampiyev, V. V. Kistanov, et al. 19 pp.
RUSSIAN, per, <u>1z. Ak Nauk SSSR</u>, Seriya Geografi, No 1, 1962, pp 24-36.
JPRS 24387

Construction of Water Projects in 1964-1965, by Phan My, 6 pp.
VIETNAMESE, np. Doc Lap, No 661, 28 Feb 1964, pp 2, 9.
JPRS 24551

The Importance of Foreign Trade, by Hoang Van Diem, 5 pp. VIETNAMESE, np. Doc Lap, No oot, 28 Feb 1964, pp 3, 9. JPRS 24551

Industry to Support Agriculture More Effectively, by Nguyen Van Tran, 17 pp. VIE FNAMESE, per, <u>Hoc Tap</u>, No 2, 1964, pp 37-46. JPRS 24437

Irrigation is the Leading Method for Developing Agricultural Production in the North, by Ha Ke Tan, 14 pp.
VIETNAMESE, per, Hoc Tap, No 2, 1964, pp. 47-52.
JPRS 24437

Development of Economy Must be Associated More Closely With Consolidation of National Defense, by Tran Hieu Tam, 10 pp. VIETNAMESE, per, <u>Hoc Tap</u>, No 3, 1964. JPRS 24386

To Attach Thinking and Organizational Tasks With Preduction, by Hoang Huu Nhan, 24 pp. VIETNAMESE, per, Hoc Tap, No 3, 1964, pp 37-45. IDBS 24230

Some Ideas on Socialist Capital Accumulation and Its Relation With Consumption in the North, by Dao Thien Thi, 25 pp. VIETNAMESE, per, <u>Hoc Tap</u>, No 3, 1964, pp 46-54, JPRS 24239

Socialist Reform of Handforaft Industry Must Be Carried Out Continuously, by Dan Tam, 21 pp. VIETNAMESE, per, <u>Hoc Tap</u>, No 3, 1964, pp 72-79. JPRS 24239

Fechnical Improvement and Construction of Material and Technical Foundations in Agricultural Producers* Cooperatives, by Nguyen Van Loc, 12 pp. VIETNAMESE, pc.; Khoa Hoc Ky Thuat Nong Ngolep, No 26, Feb 1964, pp 67-71.

JPRS 24551

Some Suggestions on the Role of Labor Unions in Labor Quota Planning, by Le Hoa, 9 pp. VIE TNAMESE, pp. <u>Lao Dong</u>, 5 Mar 1964, p. 3. JPRS 24542

The Important Role of the Laties and Wager Project in Socialist Industrialization, by Le Thanh Hghi, 9 pp. VIETNAMESE, ap. Nian Dan, 30 Jan 1964, p. 3, JPRS 24213 Far Bast Bosnomic (Contd)

Difficulties With Mechanical Equipment in Coal Mining and Irrigation, by Chieu Phong, Nguyen Trung Hau, 5 pp. VIETNAMESE, per, Nhan Dan, 3 Feb 1964, p 3. JPRS 24114

要は

Favorable and Unfavorable Factors in the National Economy, by Ha Van, 5 pp. VIETNAMESE, np, Nhan Dan, 5 Feb 1964, p 3. JPRS 24114

Subsidiary Crops as Solution to Food Problems, 8 pp. VIETNAMESE, np., Nhan Dan, 6 Feb 1964, p 2. JPRS 24114

Self-Reliance Industriousness and Thrift for Bullding Socialism, by Ha Van, 5 pp. VIETNAMESE, np, Nhan Dan, 6 Feb 1964, p 3, JPRS 24114

Direction for Vanguard Cooperatives, by Nguyen Huu Khieu, 27 pp. VIETNAMESE, np, Nhan Dan, 24, 25 Feb 1964, p 2. JPRS 24067

A New Stage in the Agricultural Gooperative Improvement, 5 pp. VIETNAMESE, up, <u>Nhan Dan</u>, 28 Feb 1904, p 3. JPRS 24551

Plant More Corn In the Mountain Regions, by Duong Hong Hen, 5 pp, VIETNAMESE, np, <u>Maan Dan</u>, 1 Mar 1964, p 3. JPRS 24551

No increase in Agricultural Taxes, by Nguyen Vao Ngu, 5 pp. VIETNAMIESE, np. Nhan Dan, 3 Mar 1964, p 3. JPRS 24551

Raise Labor Productivity in the Capital Construction Sector, by Le Thanh Ngia, 3 pp. VIETNAMESE, np. Nhan Dan, 7 M at 1964, p. 3. JPRS 24351

Strengthening Cooperative Leadership, by Le Quang Tuan, 7 pp. VIETNAMESE, np. <u>Nhan Dan</u>, 14 Mar 1964, p.2. JPRS 24851

Food Supply to Cities and Industrial Areas, by Pham Tri Tuyen, 7 pp. VIETNAMESE, pp. Nhan Dan, 20 Mar 1964, p. 3. JPRS 24881

Let Us Increase Our Breeding Livestock, by Phan Van Chieu, 7 pp. VIETNAMESE, np. Nhan Dan. 24 Mar 1964, p 2. JPRS 24542

The Struggle Between Two Schools of Thought in Goods Circulation, by Tran Nguyen, 6 pp. VIETNAMESE, np. Nhan Dan, 30 Mar 1964, p 3. JPRS 24542

Report of North Viction Council of Ministers, to Nguyen Day Trinh, 38 pp. VIETNAMESE, np. Nhan Dan, 1-3 Apr 1964. JPRS 24396

- 2 --

Far East Political

North Vietnamese Visitors Discuss Albania Vietnam War, 5 pp. ALBANIAN, np. <u>Bashkimi</u>, 7 Apr 1964, pp 1, 3. JPRS 24548

Chou Visit to Africa and Asia Described, by Dimiliter Tona, 12 pp. ALBANIAN, per, Rruna e Partise, Vol XI, No 3, March 1964, pp 11-21. JPRS 24427

The Dialectics of Four Firsts, by Kuo Li-chun, 11 pp. CHINESE, per, <u>Hung-chil</u>, No 4, 26 Feb 1964, pp 18-25, JPRS 24292

Philosophical Research Must Turn Its Face Toward the Current Revolutionary Struggle, by Kuan Feng, 5 pp. CHINESE, per, <u>Hung-ch4</u>, No 4, 26 Feb 1964, pp 26-28, JPRS 24292

Learn to Use the Divide One Into Two Method, by Lu Kuo-ying, 7 pp. CHINESE, per, <u>Hung-ch4</u>, No 4, 26 Feb 1964, pp 29-33. JPRS 24292

Put Ideological Work in the Primary Position, 10 pp. CHINESE, per, <u>Hung-Chil</u>, No 5, 17 Mar 1964, pp 14-20. JPRS 24545

Workshop Party Branch is Good at Doing Ideological and Political Work, by Chang Kao, 9 pp. CHINESE, per, <u>Hung-Chii</u>, No 5, 17 Mar 1904, pp 23-28. JPRS 24545

Challenges Chinese Communists to Debate Theory, 5 pp. FRENCH, per, <u>Le Communiste</u>, No 98, Feb 1964, pp 8, 9. JPRS 24259

Chinese Policy Changes Following End to Isolation Through French Recognition, by Isaac Deutscher, 7 pp. FRE-NCH, np. 1 LEXPESS, 9 Apr. 1964, pp. 16, 17, JPRS 24598

Suslov Report Seeks Condemnation of Chinese Leaders, Le Monde Correspondent Tatu Says, by Michel Tatu, 5 pp. FRENCH, pp. Le Monde, 7 Apr. 1904, pp. 1, 2, JPRS 24401

Indonesian CP Position Analyzed, by Hemen Ray, 16 pp. GERMAN, per, Osteuropa, No 3, 1964, pp 185-195.

GERMAN, per, <u>Osteuropa</u>, No 3, 1964, pp 185-195. JPRS 24078

Minutes of Upper House Budget Committee Meeting, 9 pp. JAPANESE, pp. 12 Feb 1964, Encl No 1 to Desp A-1219, AmEmbassy, Tokyo. Dept of State

Factionalism in Japanese Student Groups Revealed, by Sakamoto Hideo, 5 pp. JAPANESE, np. <u>Akahata</u>, 28 Mar 1964, p.5. JPRS 24307

Japanese Communist Party Central Committee Pleaum States Tasks in Combatting Modern Reviosionism, by Nakamura Ichiro, 6 pp. JAPANESE, up, <u>Akajato</u>, 2 Apr 1964, p.5. JPRS 24462

Far Bast Political (Contd)

Attinudes Concerning the General Principles of Marxism-Leninism, by Kim Chang-won, 6 pp. KOREAN, per, Kullojs, No 21, Nov 1963, pp 38-43. JPRS 23675

Revolutionary Movement and the Legacy of Tradition, by Sin Chin-kyun, 8 pp. KOREAN, per, <u>Kulloja</u>, No 3, 5 Feb 1964, pp 35-41. JPRS 24533

A Condensed Account of Comrade Yu, Tsedenbal's Speech at the Third Plenary Session of the Oborhangal Aymak Party Committee, 11 pp. MONGOLIAN, per, Namyu Am'dral, No 12, 1963, pp 3-11.
JPRS 24208

The Revolution in South Viernam Witt be Won, by Le Quang Dao, 202 pp. VIETNAMESE, bk, Cach Mang Mien Nam Nhat Dinh Thang Lot Nhung Pauc Tap, Lau Dai, Hanot, 1963, pp 1-247.

JPRS 23908

Ideological, Political and Cultural Leadership Needed Among Highland Nationallies, by Hoang Bac, 15 pp. VIETNAMESE, per, Line Tap, No 2, 1904, pp 60-27. JPRS 24438

Commemorating 45th Anniversary of Communist International, by Hong Chuong, 16 pp. VIETNAMESE, per, <u>Hoc Tap</u>, No 3, 1964, JPRS 24076

The Problem of National Liberation in This Era, 20 pp. VIETNAMESE, per, Hoc Tap, No 3, 1964, pp 1-12. JPRS 24239

The New Colonialism of Defred States Imperialises and the National Laboration Movement in Latin America, by Hong Nam, 18 pp. VIETNAMESE, per, <u>Hoc Tap</u>, No 3, 1964, pp 13-25, JPRS 24239

Strengthening the Party by Reinforcing the Ideological Front, by Le Duc Tho, 20 pp. VIETNAMFSE, np. <u>Man Dan</u>, 3 Feb 1964, p.2. JPRS 24043

Let us Firmly Develop a Vigorous Constructive Spirit and Struggle Spirit for Ideological Work, 8 pp. VIETNAMESE, np, <u>Man Dan</u>, 9 Mar. 1964, pp. 1, 4. JPRS 24335

Strengthening Political and Ideological Training in the Agricultural Cooperatives, 5 pp. VIETNAMESE, np. Nhan Dan. 10 Mar 1964, pp 1, 4.
JPRS 24335

Stronger Unity in the United National Front, 5 pp. VIETNAMESE, np, Nhan Dan, 21 Mar 1964, p 2. JPRS 24206

Developing the Role of Self Government by the People and Unrelentlessly Strengthening the Government, by Quoc Nghia, 7 pp. VIETNAMESE, np. Nhan Dan, No 3748, 25 Mar 1964, p 2. JPRS 24571

Improving the Leadership Role of the District Committee, by B.N. F., 5 pp. VIETNAMESE, np. <u>Main Dan</u>, No 3648, 25 Mar 1964, p 2. JPRS 24571

Far East Political (Contd)

Some Thoughts on the Choice and Presentation of National Assembly Candidates. VIETNAMESE, np. Nhan Dan., 27 Mar 1964, p 2. JPRS 24571

New Potency of the Revolutionary Struggle, by Truong Anh, 7 pp. VIETNAMESE, np, Nhan Dan, 28 Mar 1964, p 5. JPRS 24571

Report of North Vietnam National Assembly Standing Committee, 12 pp. VIETNAMESE, np, Nhan Dan, 31 Mar 1964, pp 2, 3, J PRS 24457

Concrete Stipulations Concerning the Election of National Assembly Representatives, by Tran Van Khuong, 7 pp. VIETNAMESE, np, Nhan Dan, 8 Apr 1964, p 2. JPRS 24544

To Improve the Political Life of Our Party Sections, by Vu Dung, 8 pp. VIETNAMESE, np. Nhan Dan, 11 Apr 1964, 12 Apr 1964, p 2. JPRS 25544

Promote the Role of the National Assembly, by Hoang Quoc Viet, 9 pp. VIETNAMESE, np, <u>Nhan Dan</u>, 14 Apr 1964, p 2. JPRS 24544

Execute Correctly the Laws for the Election of Representatives to the National Assembly, by Ung Van Khiem, 6 pp. VIETNAMESE, np. Nhan Dan, 15 Apr 1964, p 2. JPRS 24544

Far East Military

Military Report of the National Front for the Liberation of South Victnam, by Tran Nam Trung, 8 pp. VIETNAMESE, np. Quan Dot Nhan Dan, 28 Jan 1904. JPRS 23071

1963, a Year of Important Developments in the Movement for Constructing Reserve Forces in the North Western Arca, by Yu Lap, 5 pp. VIETNAMESE, np. Quan Doi Nhan Dan, 8 Feb 1964. JPRS 24571

Far East Geographic

Hua Hsien Has Truly Become a County of Flowers, by Chang Han-ch⁴ing, 9 pp. CHINESE, per, Hung-cl-⁴j, No 4, 26 Feb 1964, pp. 13-17, JPRS 24292

Par Bast Geographic (Contd)

Lu Mountain and the Glacial Remnants of Its Northeastern Cliffs, by Ts¹ao Chao-yuan, Wu Hsi-hao, et al, 8 pp. CHINESE, per, K¹o-hsuch T¹ung-pec, No 1, 1964, pp 48-51. JPRS 24224

Third National Congress of the China Geographic Society, and the General Conference on the Support of Agriculture, by Hsing Su, 10 pp. CHINESE, per, K o-hsuch Ttung-pao, No 1, 1964, pp 89-92.

JPRS 24140

Explanatory Text to the Geologic Map of Hokkatdo, Scale 1:600,000, by Yasuo Sasa, Tadahiro Nemoto. JAPANESE, rpt. 1960. Dept of Imerior 209(900) qUn34pr No 740

Notes on the Karnall River Photography, by Hiteyoshi Hayazaki, 8 pp. JAPANESE, per, Sokuryo, Vol XIII, No II, 1963, pp 15-19. (Call No TASOT S68, Vol 13, No II, Eng Tr) Army Map Service

Types of Karst in Bast China, by S. Ordzhontkidze, 28 pp. RUSSIAN, per, <u>Iz Vyssh Ucheb Zaved, Geolog i Razved-ka</u>, No 2, 1904, pp 39-55.
JPRS 23934

Far East Sociological

Correct Recognition and Handling of Problem of Religion, by Yu Hsiang, Liu Chun-wang, 12 pp. CHRNESE, per, <u>Hung-chil</u>, No 4, 26 Feb 1964. JPRS 24292

Intensify Study and Discussion of the Theory of Historical Method, 7 pp. CHINESE, per, <u>Hung-ch⁴1</u>, No 5, 47 Mar 1964, pp 29-33. JPRS 24545

The Freedom of Creation in Yugoslavia, by Mu Hul, 9 pp. GHINESE, per, Hung Ca⁴I, No 5, 1964, pp 39-45. LBRS 23545

Medical Education in the People¹s Republic of China, by Tomic Yamaguchi, 11 pp. JAPANESE, per, <u>Kagaku Asahi</u>, No 3, 1964, pp 91-96. JPRS 24268

Let Us Get Serious on Improving Our Language Culture, 8 pp. KOREAN, per, <u>Kulloja</u>, No 23, 5 Dec 1963, pp 2-7. JPRS 23953

Our Party's Policy on the National Language, by Kim Pyong-je, 8 pp. KOREAN, per, <u>Kulioja</u>, No 23, 5 Dec 1963, pp 8-12. JPRS 23953

Resist the Decadent Western Mode of Life, by Yi Song-gon, 6 pp.
KOREAN, per, Kulleja, No 23, 5 Dec 1963, pp 27-30.
JPICS 23953

Par Bast Sociological (Contd)

=

Socialist Construction and the Chiongsan-rd, 10 pp. KORRAN, per, Kulloja, No 3, 5 Feb 1964, pp 27-34. JPRS 24533

To Improve the Educational Work of Party Organizations Among Cadres, by M. Lubsantseren, 7 pp. MONGOLIAN, per, Namyn Am'drai, No 12, 1963, pp 12-18.
JPRS 24208

Some of the Queetions Concerning the Union Between the Working Class and Cooperativized Peasants of the Mongolian Peoples Republic, by Sh. Jumdaan, 8 pp. MONGOLIAN, per, Namyn Am*dral, No 12, 1963, pp 30-36.

JPRS 24208

Materials on the Social and Family Organization of the Puok People of Northwest Vietnam, by Fan Zhau Zat, 13 pp. RUSSIAN, per, <u>Sovet Etnografiya</u>, No 5, Sep, Oct 1962, pp 48-56. JPRS 24356

Win Greater Victories in 19 o4, 5 pp. VIETNAMESE, per, <u>Hoc Tap</u>, No 90, Jan 1904, pp 6-10, JPRS 24263

Technological Education, by Nguyen S¹ Ty, 15 pp. VIE FNAMESE, per, <u>Hoc Tap</u>, No 90, Jan 1964, pp 71-79. JPRS 24203

Our Country is on the Road to Socialist Indiprivalization, by Le Thanh Nghi, 17 pp. VIETNAMESE, per, the Tap, No 2, 1954, pp 27-36, JPRS 24438

Let Us Protect Our Workers! Health to Realize Socialist Industrialization, by Nguyen Thanh Nghi, 7 pp. VIETNAMESE, per, <u>Hoc Tap.</u> No. 3, 1954, pp. 55-59. JPRS 24239

The Old Garbage Heap, Volume 1; A Typical Example of Naturalism in Literature, by The Toan, 17 pp. VIETNAMESE, per, <u>Hoc Tap</u>, No 3, 1904, pp 66-71. JPRS 24239

Mobilizing the Thinking of the Masses During Step 2, 5 pp.
VIETNAMES 1, np. Nhan Dan. 20 Mar 1904, p 2.
LDBS 24571

The Principle of Our Socialist Legal System, by Truong Fan Phat, 9 pp. VIE FNAMESE, np, Man Dan, No 3049, 20 Mar 1964, p 2. JPRS 24571

Propaganda and Education Concerning the Constitution, by Hoang Quoc Vict, 5 pp. VIETNAMESE, np. Nhan Dan, 9 Apr 1964, p 2, JPRS 24544

Ideological Work Builds Up Army, by Dinh Chan, 10 pp. VIETNAMESE, up, Quan Doi Nhan Dan, 3 Dec 1963, p.3. JPRS 23*03

Modern Revisionism in Yagolavian Literature, by Hoang Trinh, 15 pp. VIETNAMESE, per, <u>Tap Chi Yan Ho</u>c, No 1, 1904, pp 1-10.
JPRS 24550

Far East Sociological (Contd)

Five Years of the Literary Institute, by Dang Thai Mai, 21 pp. VIETNAMESE, per, Tap Chi Van Hoc. No 2, 1964, pp 94-107.
JPRS 24550

1964 Prospects for the Medical Branch, by Phain Ngoc Thach, 8 pp. VIETNAMESE, per, Y Hoc Thuc Hanh, No 103, Jan 1964, pp 2-6. JPRS 24550

Latin America Economic

The Cuban Revolution After Five Years, by Adolf Gilly, 22 pp. FRENCH, per, Particons, Dec 1963-Jan 1964, p. 101; Feb-Mar 1964, pp 62-73. JPRS 24129

The Economic Problems of the Cuban Revolution, by Michel Merlier, 10 pp. FRENCH, per, Partisans, Feb, Mar 1964, pp 75-90. JPRS 24129

Report by Directorate General of Telecommunications, 19 pp.
SPANISH, rpt., Memoria: 1960, 1961, Mexico, 9 May 1963, pp. 77-93. (Call No, Eng Fr.)
Army Map Service

Production of Factories, Finished and Under Construction Outlined, 14 pp. SPANISH, bk, <u>Nucestra Industria</u>, No. 1, 1904, pp. 3-75. JPRS 23968

Plan For a Communications Code, For Boltvia, 41 pp. SPANISH, pp. Drawcen de Codho de Communicaciones, Boltvia, 1958, pp. 1-32. (Eng. Tr.) Army Map Service

The Electric Energy Forum, 19 pp, SPANISH, per, 24 Nov 1963, pp 33-41, JPRS 24503

The First National Production and Quality Conference of the National Rail Workers Union, 23 pp.
SPANISH, per, <u>Ferrovias</u>, No 5, Oct 1963, JPRS 24502

Cuba's Sugar Bagasse Constitutes an Incalculable Asset, 7 pp.

7 pp.

21 Mar 1963, pp 1; 2; 5; 7.

21 Mar 1963, pp 1; 2; 5; 7.

JPRS 24300

Staty Thousand Pesos To Be Saved Annually by Port Personnel, 5 pp.

SPANISH, np, Noticias de Hoy, Vel XXVI, No 66, 20 Mar 1964, pp 1-4; 6.

JPRS 24300

Calculating Disability Pension II, 5 pp. SPANISH, per, <u>Trabajo</u>, No. 4, 15-28 Feb 1964, pp. 29-49.
JPRS 24540

Legal Orientations on Labor Matters, 5 pp. SPANISH, per, 1rabajo, No 4, 15-28 Feb 1964, pp 45-47.

JPRS 24540
On the Financial Budget, by the Guevara, 7 pp SPANISH, per, 1rimestre, No 7, Jul-Sep 1963, pp47-65.

JPRS 24540

Latin America Political

Chilean Communist Party Seeks Unity With Antigovernment Groups, by M. F. Kudachkin, 18 pp. RUSSIAN, per, Yoprosy Istorii Kommunistich Partiya Sovet Soyuza, No 2, 1964, pp 54-65, JPRS 23907

Sample Regulation for the State Farm, 12 pp. SPANISH, np, <u>Hoy</u>, 18 Mar 1964, pp 6-8. JPRS 24242

Sample Regulation for the Direction Unit of the Agricultural Group, 14 pp. SPANISH, np, Hoy, 18 Mar 1964, pp 7, 8. JPRS 24242

The Youthful Brazilian Leader Goulart En Route to Cuba, 6 pp.

SPANISH, np. Noticias de Hoy, Vol XXVI, No 69, 21 Mar 1964, pp 1-3.

JPRS 24300

Dr. Armando Hart Speaks at Closing Session of the First National UES Assembly, 16 pp. SPANISH, np. <u>Revolucion</u>, 1 Apr 1964, p 1, 4, 5. JPRS 24405

Latin America Military

National Gun Factory, 13 pp.
SPANISI 1, rpt, El Departamento de la Industria
Militar, Mexico, 1960, pp 1-16. (Call No R-232-61,
Eng Tr)
Army Map Service
National Munitions Factory; (2) Arsenal; (3) .30" Rifle
Cartridge Factory, 20 pp.
SPANISI 1, El Departamento de la Industria Militar,
20 Nov 1962, pp 1-39. (Call No Uncataloged, Eng 1r)
Army Map Service

Organization and Command OM-1. SPANISH, bk, Organization / Mando OM-1, Madrid, 1902, 28 pp, Encl No 1 to 2889000554. OARMA, Spain. ACSI 1-4502 ID 2889000564

Military News Party Set up in Gran Piedra, Various Types of Training Continued, Military Men Honored, 5 pp. SPANISH, np. <u>Verde Olivo</u>, 5 Jan 1964, pp 13, 15. JPRS 24197

Latin America Geographic

Historical Monograph Military Geographic Service, 8 pp. SPANISH, rpt, Boletin Cinquentenario del Servicio Geografico Militar, Uruguay, 30 May 63, pp 5-10. (Call No GA762 U83, Eng Tr) Army Map Service

Latin America Sociological

Education News of Secondary School Students Union Revolutionary Training School Administration Institute, Educational Organizations Created, 5 pp. SPANISH, np, Hoy, 4 Mar 1964, p 3. JPRS 24197

The Task of Mass Education Requires Enthusiasm, Organization, Political Awareness and Technical Efficiency, 8 pp. SPANISH, np, Hoy, 19 Mar 1964, p 6. JPRS 24267

Instructors, 7 pp. SPANISH, per, <u>Verde Olivo</u>, 12 Jan 1964, pp 5-9. JPRS 24233

World Wide Economic

CEMA Facts and Figures, 9 pp. RUSSIAN, per, <u>Kommunist</u>, No 5, 1964, pp 112-116. JPRS 24458

Vital Problems in the Development of Irrigation and Land Improvement, by K. Shubladze, 8 pp. RUSSIAN, per, Mezh Sel'skokhoz Zhur, No 1, 1904, pp 13-17.
JPRS 24458

The Soviet Union in the System of International Economic Relations, by I. Dyumulen, 12 pp. RUSSIAN, per, <u>Miroyaya Ekon I Mezh Omosheniya</u>, No 3, 1964, pp. 81-89.
JPRS 24458

World Wide Political

Relation of Foreign and Domestic Policy to Revolution and Building Socialism Discussed, by Poto Cami, 14 pp. ALBANIAN, per, Rruga e Partise, Vol XI, No 3, 1964, pp 22-34. JPRS 24427

Branko Lazitch Reviews Illstorical Precedents for Schism, by Branko Lazitch, 8 pp. FRENCH, per, <u>Est et Quest</u>, No 317, 16-31 Mar 1964, pp 10-13. JPRS 24336

French Central Committee Hears Guyot Attack Chinese Positions and Call for Immediate International Communist Conference, by Raymond Guyot, 9 pp. FRENCH, np. <u>I¹Itumanite</u>, 28 Mar 1964, p. 4. JPRS 24336

The World Federation Heinz Zoeger and Sino-Soviet Competition in Africa, by Heinz Zoeger, 7 pp. GERMAN, per, SBZ Archiy, No.1, 1964, pp. 34-36, JPRS 24367

Khrushchev Discusses Peace in Proface to Italian Edition of Speeches, 10 pp. ITALIAN, per, <u>Rinascita</u>, No 21, 21 Mar 1964, pp 17-19, JPRS 24235

World Wide Political (Contd)

Togliarti Tells Chinese That the International Communist Movement Intends to Pursue Its Present Goals, by Palmiro Togliatti, 10 pp. ITALIAN, per, <u>Rinascita</u>, No 15, 11 Apr 1964, pp 1, 2. JPRS 24307

CPSU Justifies Its Policy to Izvestiya Readers, 6 pp. RUSSIAN, np, Izvestiya, 17 Apr 1964, p 2. JPRS 24462

For the Unity of the International Communist Movement on Principles of Marxism-Leninism, 52 pp. RUSSIAN, per, Kommunist, No 5, 1964, pp 13-52, JPRS 24412

Ukrainian Party Secretary Lauds Cooperation Among Soviet Nationalities, by A. Skaba, 7 pp. RUSSIAN, np. <u>Prayda</u>, 23 Mar 1964, pp 2, 3, JPRS 24235

Estonian Daily Notes Advantages of World Socialist System, by P. Konev, 6 pp. RUSSIAN, np. Sovet Estoniya, 27 Feb 1964, p 3. JPRS 24172

SCIENTIFIC

<u> Астоврасс</u>

His Second Satellite, by Yu. A. Pobedonostsey, o pp. RUSSIAN, Jr., Stantsii v Kosmose, Shornik Statey, 1960, pp. 49-54. 9692309
FTD-17-63-040

Flight to Mars is Becoming a Reality, by L. I. Sedov, 5 pp. RUSSIAN, bt, Stantsli v Kosmose, Sbornik Statey, 1960, pp 234-238, 9692309 FTN-TT-63-1041

Artificial Earth Satellites and the Problems of Space Flight, by N. P. Barabashov, 5 pp. RUSSIAN, bk, <u>Stantsit v Kosmose, Shornik Statey</u>, 1040, pp. 259–264, 9692309 F FD-TT-63-4041

From Moon to Earth, by P. I. Yevdokimov, 5 pp. RUSSIAN, bk, <u>Stantsii v Kosmose, Shornik Statey</u>, 1960, pp. 284–288. 9692300 FTD- I T-63-1041

First Flight to the Moon, 10 pp. RUSSIAN, 18, <u>Stantsii v Kosmose</u>, <u>Sbornik Statey</u>, 1960, pp 291-299, 9692309 F 115-TT-63-1041

Nonliving Astronaut, by B. S. Danilin, 6 pp. RUSSIAN, 6k, <u>Stantsli v Kosmose</u>, <u>Sbornik Statey</u>, 1900, pp 376–380, 9692309 1-115-1-1-6-3-16-41

Connection Between Aerodynamic Heating and Surface Friction, by L. V. Kozlov. RUSSIAN, per, <u>12 Ak Nauk Ordel Tekh Nauk</u> Mekh i Mash, No 3, 1963, pp. 108-111. *Navy APL J370

Scientific Aerospace (Contd)

A Visual Photographic Method of Observing Faint Satellites and Space Rockets, by B. A. Firago.
RUSSIAN, per, Iz Glav Astron Observ v Pulkove, Vol XXII, No 1, 1962, pp 169-178.
*FTD-TT-64-519

Spacesuits, by Yu. Savitskiy, 13 pp. RUSSIAN, per, Nauka i Zhizni, No 12, 1963, pp 40-44. 9692323
FTD-TT-64-134

Polar Orbits of Artificial Satellites, by V. G. Degtyarev, RUSSIAN, per, <u>Prik Mate i Mekh</u>, Vol XXVII, No 6, 1963, pp 1102-1105. *Navy/APL J349

Stability of Airplane Motion Controlled by Automatic Pilot on a Runway, by L. G. Lobas. RUSSIAN, per, <u>Prik Mekh</u>, Vol IX, No 6, 1963, pp 659-669.

**ITD-TT-64-560

Impigement of an Annular Jet Onto a Target, by V. I. Khonzhonkoy. RUSSIAN, per, Trudy Tsentral Aero-Gidrodinamich hust Prom Aerodinam, No 23, 1962, pp 174-199. FFTD-TT-61-513

Scientific Agriculture

Investigation of Spontaneous Variability in Pure Lines of Hordeun, by V. I. Didust, o pp. RUSSIAN, per, <u>Botanicheskii Zhurnal</u>. Vol XXI, No 2, <u>1936</u>, pp. 189-195. <u>922</u>1964 OTS 03-11042 P1,-480

Synthesis and Accumulation of Sucrose by the Sugar Beet, by A. L. Kursanov, 9 pp. RUSSIAN, per, Botanicheskii Zhurnal, Vol XXXIX, No 4, 1954, pp. 4, 22-487, 922107, OTS 63-41014
PL-480

Shortcomings in Planning Harm the Economy, by N. Stremskiy, I. Bogachik, 6 pp. RUSSIAN, per, <u>Ekon Sel¹skogo Khoz</u>, No 1, 1964, pp 65-68. JPRS 24221

Agricultural Development Plan for 1964-1965, 9 pp. RUSSIAN, per, Ekon Sel[†]skogo Khoz, No 2, 1964, pp 1-7, JPRS 24221

Susceptibility of Cotton to Wilt as a Function of the Water Regline of Soil and Plant, by A. Avetisyan, M. Smhatyan, M. Smhatyan, per, Iz Ak Nauk Armyanskoy SSR, Vol XV, No 1, 1962, pp 59-68. CSIRO/No 6469

Natural Radioactivity of Soils, by V. I. Baranov, V. I. Vernadskiy, 9 pp. RUSSIAN, per, 1z Ak Nauk SSSR, Seriya Biolog, Vol XXIX, No 1, 1964, pp 159-163. JPRS 23912

Material on the Origin of Winter Barley, by P. E. Grebennikov, 15 pp. RUSSIAN, per, <u>Izvestiya Krasmodarskogo Sel¹skokhoz-vatstvennogo Inst.</u> Vol 1, 1935, pp. 65-79. 9221970 018-63-11041 P1-480

Scientific Agriculture (Contd)

A Record Cotton Harvest in Khorezmakaya Ohlaat of Uzbekistan, by B. Rakhimov, 6 pp. RUSSIAN, per, Kolkhoz-Sovkhoz Proiz. No 2, 1964, pp 3, 4. JPRS 24368

Reserves for Increasing Grain Production in Naserves for increasing Grain Froduction in Tadzhikistan, by V. Nevzorov, B. Kreydik, 6 pp. RUSSIAN, per, Kolkhoz-Soykhoz Proiz Tadzhik, No 10, 1963, pp 14-17.
JPRS 24262

The Effect of Irradiation on the Microflora of Beef, by T. S. Bushkanots, G. V. Ladukhina, 5 pp. RUSSIAN, per, Konservnaya i Ovoshch Prom, No 1, 1904, pp 25-28.

ACSI 1-4371
1D 2204008864
525th MI Gp

Utilization of Liquid Nitrogen Fertilizers, by P. Baranov, 17 pp. RUSSIAN, per, Mezh Sellskokhoz Zhur, No 1, 1963, pp 55-61. JPRS 24038

Economic Substantiation of Farm Production Structure, by M. Lemeshev, 17 pp. RUSSIAN, per, Plan Khoz, No 1, 1964, pp 22-33. JPRS 24221

Translation of the Prayda Editorial, 5 pp. RUSSIAN, np, Prayda, 24 Mar 1964. JPRS 23918

Heterosis in Vegetable Crops, by D. D. Brezhnev. RUSSIAN, per, Priroda, No 9, 1963, pp 50-55. 9222255 USDA Tr A-1439

Mineral Fertilizers and Crop Yields, by A. V. Sokolov, 10 pp. RUSSIAN, per, <u>Priroda</u>, No 12, 1963, pp 25-29. JPRS 24297

For Improving Agricultural Production in Moldavia, 8 pp. RUSSIAN, np. Sovet Moldaviya, 11 Mar 1964, p 1. JPRS 24368

On the Theory of Forest Improvement Cuttings, by V. P. Timofeyev, 20 pp. RUSSIAN, per, Trudy Inst Lesa, Ak Nauk SSSR, Vol XXXVII, 1958, pp 46-66, 9221972 OTS 63-H026 PL~480

The Building of the Mashinyy Canal in Turkmenistan, 5 pp. RUSSIAN, np. <u>Turkmen Iskva</u>, 14 Mar 1964, p.l.

JPRS 24368

The Role of Fertilizers in Creating the Material-Technical Basis of Communism, by N. S. Avdonin, RUSSIAN, per, Vest Moskov Univer, No 2, Mar. Apr 6 1962, pp 7-15.
JPRS 24137

Optimum Size for Sovkhozes, by I. A. Borodin, 28 pp. RUSSIAN, per, <u>Voprosy Ekon</u>, No 12, 1963, pp 34-51. JPRS 24221

Capital Investments in Agriculture to 1964, by Atanas Isanev, 7 pp. BULGARIAN, per, Partien Zhivot, No 3, Feb 1964, pp 83-88. JPRS 2445-4

Scientific Agriculture (Contd)

Pinancing Agricultural Enterprises in the State Agricultural Sector and Uniform Agricultural Cooperatives, by Antonin Stratilek, 13 pp. CZECH, per, Finance a Uver, No 1, 1964, pp 6-13. JPRS 24237

Youth Equipment New Technology the Key Problem of Agriculture, by Pavel Blaho, Stanislav Halak, 11 pp. CZBCH, per, Zivot Strany, No 2, Jan 1964, pp 99-104.

Riddling Performance of Separating Elements of Potato Harvesters in the Field, by W. Noack. GERMAN, per, Deutsche Akademie der Landwirtschaftswissenschafter Tagungsberichte, No 22, 1959, pp 31-46, GB/141/135

Determination of the Nutritive Capacity of Soil by Means of Ion Exchangers, by W. Tepe. GERMAN, per, <u>Landwirtschaftliche Forschung</u>, Vol VII, 1956, pp 83-89. GB/25

Problems of the Development of Agricultural Statistics, by Gerd Fuege, 12 pp. GERMAN, per, Statistische Praxis, No 2, 1964, pp 40-45. JPRS 24210

Viticultural Experiments With Pure Basalt Powder, by J. Babarezy. HUNGARIAN, per, <u>Agrokemir es Talajtan</u>, Vol III, 1954, pp 103-112.

Partys Agricultural Policy, by Chon Yong-sik, 20 pp. KOREAN, np. Nodong Simmun, 13 Mar 1964, pp 2, 3, 4, JPRS 24440

Observations on the Influence of Light on Seeds of Certain Plant Species During Storage, by Marian Litynski, Zbigniew Urbaniak, 40 pp. POLISH, per, Hodowia Roslin Aklimatyzacja i Nastemictwo, Vol II, No i, 1958, pp 21-66. 9221984 OTS 61-31254 121.-480

Variations of Hybrids of White Clover (Trifolium Repens L.) With Red Clover (Trifolium Pratense L.), Repens L.J. with Red Clover (Trifolium Prate by S. Starzycki, 43 pp. POLISH, per, Hodowia Rosiln Aklimatyzacja i Nastemictwo, Vol III, No 3, 1959, pp. 277-319. 0221985 OTS 61-31276 PL-480

Observations on Water Content Variations in Maize Ears in the Process of Drving, by Anna Wikoje, Krystyna Cienska, 33 pp. POLISII, per, <u>Hodowia Rostin, Aklimatyzacja i Nastemictwo</u>, Vol III, No 5, 1959, pp 597-636. 9221981 OTS 61-31291 PL-480

Investigation of Interspecific Hybrids of Clovers Trifolium Repens L. X Trifolium Pratense Lag by S. Starzycki, 48 pp. POLISH, per, Hodowia Roslin Aklimatyzacja Nastennictwo, Vol V, No 3, 1961, pp 285-336. 9221985 OTS61-31276 PL-480

Rumanian Agrochemical Research, by Z. Borlan, 11 pp. RUMANIAN, per, Probleme Agricole, Vol XVI, No 2, 1964, pp 46-54. JPRS 23961

Scientific Agriculture (Contd)

Advances in Rumanian Agricultural Science, by G. Ionescu-Sisesti, 7 pp. RUMANIAN, per, <u>Probleme Agricole</u>, Vol XVI, No 3, 1964, pp 14-18. JPRS 24284

Chemical Fertilizers An Important Means for Reaping Harvest Yields, by Nicolae Giosan, 6 pp.
RUMANIAN, np. Scintela, Vol XXXIII, No 6137, 15 Jan 1964, pp 1, 3.
JPRS 24277

Intensive Pisciculture, by Th. Busnita, 5 pp. RUMANIAN, per, Viata Economica, Vol II, No 6 (25), 7 Feb 1964, pp 8, 12. JPRS 24039

Soils and Soil Problems in the Marsh Between Pancevo and Dubovac, by N. Pavicevic, 30 pp. SERBO-CROATIAN, per, Arhiv za Poljopvivredne Nauke, Vol XVI, No 52, 1963, pp 3-32. OTS 63-11453/2 PL-480

The Rate of Sward Growth and the Effect of Nitrogen Pertilization on the Botanical Composition of Grasses, by J. Cizek, 18 pp.
SERBO-CROATIAN, per, Arhiv za Poljoprivredne Nauke, Vol XVI, No 52, 1963, pp 36-52.
OTS 63-11453/2
PL-480

Investigations of the Possibilities for Raising Artificial Pastures in Southeastern Srem, by S. Ocokoljic, II pp. SERBO-CROATIAN, per, Arhiv za Poljoprivredne Nauke, Vol XVI, No 52, 1963, pp 56-65. OTS 63-11453/2 PL-480

A Contribution to the Study of Leguminous Crops and Mixtures of Leguminosae and Grasses on Podzolic Solls in the Region of Krusevac, by M. Stanojevic, 12 pp. SRRBO-CROATIAN, per, Arbity za Poljoprivredne Nauke, Vol XVI, No 52, 1963, pp 69-80. OTS 63-f1453/2 pp. 1-480.

Contribution to the Study of Metalbolism in Nodule Bacteria of Soybean, Lupine, Alfalfa, and Glover, by A. Modrie, R. Strunjak, 8 pp. SERBO-CROATIAN, per, Arhiv za Poljoprivredae Nauke, Vol XVI, No 52, 1963, pp 84-90. OTS 63-11453/2 PL-480

Some Property Changes in Varieties of Wheat Under the Effect of Various Doses of X-Rays, by M. Penele, D. Jelenic, 12 pp. SERBO-CROATMAN, per, Arhiv za Poljoprivredne Nauke, Vol XVI, No 52, 1963, pp 94-104.

OTS 63-11453/2
P1-480

Investigations of Pollen Germination and Self-Pertilization of Important Quince Varities Grown in Yugoslavia, by A. Stancevic, 6 pp. SERBO-CROATIAN, per, Arhiv za Poljoprivredne Nauke, Vol XVI, No 52, 1963, pp 106-110.

OTS 63-11453/2
PL-480

Comparative Investigations on Fartening Lambs of the Cigaja Breed and Its Crosses (FI Generation) With Hampshire and Ile de France to 90 Days Old, by N, Mitic, M, Kosanovic, 9 pp. SERBO-CROATIAN, per, Arkly za Poljop:ivredne Nauke, Vol XVI, No 52, 1963, pp 113-121. OTS 63-11453/2 P12-480

Scientific Agriculture (Contd)

The Relation Between Age at First Calving and Milk Yield During the First Lactation, by M. Belic, 6 pp.
SERBO-CROATIAN, per, Arhiv za Polioprivredne Nauke, Vol XVI, No 52, 1963, pp 124-128.
OTS 63-11453/2
FL-480

The Effect of Using Mixtures of Different Compositions in the Nutrition of Early Weaned Piglers, by A. Sreckovic, M. Uvalin, 7 pp. SERBO-CROATIAN, per, Arhiv za Polioprivredne Nauke, Vol XVI, No 52, 1963, pp 131-138.

OTS 63-11453/2
PPL-480

The Geographic Distribution of Scilla Pratensis, by Valentina Gazi-Baskova, 6 pp. SERBO-CROATIAN, per, <u>Bioloski Glasnik</u>, Vol XV, No 1, 1962, pp 49-54. OTS 62-11762/1 PL-480

Cattle Husbandry, 16 pp. SERBOCROATIAN, per, <u>Jugoslovenski Pregled</u>, No 1, 1964, pp 14-19, JPRS 24526

Scientific
Biological & Medical Sciences

Soviet Research on Biological Control Systems; A Survey of the Published Literature, 1962-1963, by Walter R. Stahl, 40 pp. RUSSIAN, rpt. JPRS 24257

Soviet Animal Parasitology, 43 pp. RUSSIAN, rpt, 1959-1963. JPRS 23978

Defoliants and Dessicants, by Ya. V. Samollova, RUSSIAN, bk, Defolianty J. desikanty, 1963. 9222248 USDA Tr A-1432

Contemporary Radio Electronics and Problems of Medicine and Biology, by V. G. Marvodiadi, I. T. Akulinichev, 17 pp. RUSSIAN, bk, <u>Elektronika v Meditsine</u>, 1900, pp 38-50, 9692302 FTD-TT-63-1188

An Electroencephaloscope With Dual Commutation, by V. M. Anan'yev, 13 pp.
RUSSIAN, bk, <u>Elektronika v Meditaine</u>, 1960, pp 62-70. 9692363
FTD-TT-63-190

Electronic Differentiating Devices for Analysis of Physiological Processes, by Ye. B. Babskly, V. L. Karpman, II pp. RUSSIAN, bk. Elektronika v Meditsine, 1960, pp 71-78. 9692364 FTD-TT-63-1191

Some Problems of Recording Heart Sounds, by A. I. Kobleats-Midshke, 15 pp. RUSSIAN, bk, <u>Elektronika v Meditsine</u>, 1960, pp 10-119, 9692368 FTD-TT-03-1193

Technical Procedures for Detecting Weak Bioelectrical Responses, by V. A. Kozhevnikov, 13 pp. RUSSIAN, bk, <u>Elektronika v Meditsine</u>, 1960, pp 120-129. 9692445 FTD-TT-63-1194

Recorders in Electromedical Diagnostic Apparatus, by B, N. Livshits, N. A. Solov'yev, 9 pp. RUSBIAN, bk, Elektronika v Meditaine, 1960, pp 130-135. 9692444
PTD-TT-63-1195

The Physiological Role of Acetylcholine and the Search for New Medicinal Drugs, by M. Ya. Mikhel'son, 656 pp. RUSSIAN, bk, Fiziologicheskaya Rol' Atserilkholina i Izyskanjye Novykh Lekarstvennykh Veshchesty, Leningrad, 1957, pp 1-462.

JPRS 24236

Photosynthesizing Bacteria, by Ye. N. Kondratiyeva, 140 pp. RUSSIAN, bk, Fotosinteziruyushchiye Bakterii, Moscow, 1963, pp 3-111; 265-274.

Genetics of Bacteria, by N. N. Zhukov-Verezlanikov, A. P. Pekhov, 15 pp. RUSSIAN, monograph, <u>Genetika Bakteriy</u>, Chapter XIV, 1963, pp 329-346. JPRS 24359

Surgical Treatment of Thermal Burns, by V. D. Braus', 56 pp. RUSSIAN, bk, Khirurgicheskoye Lechentye Termicheskikh Ozhogov, Kiev, 1963, pp 3; 5-11, 231-250; 337-346; 383.

JPRS 23933

Materials on the Study of Flora and Vegetation of the Ural, 193 pp. RUSSIAN, bk, <u>Materialy po Izucheniya Flora i</u> <u>Rastite*nosti Urala i</u>, 1962, pp 1-130, 9692305 FTD-17-63-665

Pathogenesis and Treatment of Burn Sickness, by G. D. Vilyavin, O. V. Shimova, 58 pp. RUSSIAN, bk, <u>Patogenez i Lesliente Ozhogovoy</u> <u>Bolezni</u>, Moscow, 1963, pp. 3-34; 229-253; 275, 276. JPRS 24338

The First Group Flight into Outer Space, by N. M. Sisakyan, V. I. Yazdovskiy. (SF-3180) RUSSIAN, bk, <u>Pervyy Gruppovoy Kosmicheskiy Polet Nauka</u>, Moscow, 1964, 156 pp.

Problems of Space Biology, by N. M. Sisakyan, V. I. Yazdovskiy. (NY-9171) RUSSIAN, bk, <u>Problemy Kosmicheskoy Biologii</u>, Vol III, Moscow, 1964, pp 3-490. *JPRS

The Effect of Radioactive Fallout on Soils and Plants, by R. M. Aleksakhin, 54 pp. RUSSIAN, bk, <u>Radioaktivnoye Zagryazneniye Pochvy</u> i <u>Rasteniy</u>, 1963, pp 2-25; 88-111.

JPRS 23957

AH-Union Conference on Corn Production, RUSSIAN, bk. Sokrashchennye Materialy, Moskva. 1961–528 pp. 9222250 USDA Tr. A-1434

Tissue Cultures in Virology, by V. D. Solov¹yev, T. A. Bektemirov. RUSSIAN, 6k, <u>Tkaneyye Kullury v Virosologii</u>, 1963, Encl No 7 to ALUSNA, Helsinki, IR 5831037663. *ACSI I-4520 ID 220401564

Problems of the Physiology and Pathology of Higher Nervous Activity in Man and Animal, 1037 pp. RUSSIAN, bk, <u>Voprosy Fiziologii i Patologii Nervnoy</u> <u>Sistemy</u>, 1050, pp 1-632. F (D-11-63-651

Scientific Biological & Medical Sciences (Contd)

Problems in the Physiology of Intracranial Blood Circulation and Their Clinical Implications, by A. A. Kedrov, A. I. Naumenko. RUSSIAN, bk, Yoprosy Fiziologii Vnutricherepnogo Krovoobrasicheniya s Klinicheskim ikh Osveshcheniyem, Leningrad, 1954, 135 pp. NASA TT P-156

The Biological Activeness of Preparations Made From Stag Antiers Prosorved at Low Temperatures, by V. P. Solov'yeva, L. Ye. Garnitskaya, 9 pp. RUSSIAN, per, Aptechnove Delo, Vol XIII, No 1, Jan, Feb 1964, pp 43-53.

JPRS 24348

Morphology and Materialistic Ideology, 5 pp. RUSSIAN, per, <u>Arkhiv Anatomili, Gistologii i Embriolog</u>rii, Vol XLVI, No 1, 1964, pp 3-5.
JPRS 23892

The Problem of Wholeness of the Organism and Its Morphological Aspects, by A. G. Knorre, 37 pp. RUSSIAN, per, Arkhiv Anatomit, Cistologii i Embriologii, Vol XLVI, No 1, 1904, pp 6-28.

JPRS 23892

Tissue Regulation and its Biological Significance, by A. N. Studitskiy, 33 pp. RUSSIAN, per, Arkhiv Anatomii, Gistologii 1 Embriologii, Vol XLVI, No 1, 1964, pp 29-49, JPRS 23892

Cybernetics and Some Problems of Morphology, by N. D. Dovgyallo, 15 pp. RUSSIAN, per, Arkhiv Anatomit, Gisgologii 1 Embrelogii, Vol XLVI, No 1, 1964, pp 62-70. JPRS 23892

Immunological Reactions and Wholeness of the Organism, by A. Ya. Fridenshtey, 12 pp. RUSSIAN, per, Arkhiv Anatomii, Gistologii i Embriologii, Voi XLVI, No 1, 1964, pp 80-87. JPRS 23892

Cortical Fibers in the Retina of Monkeys, by S. A. Shibkova, L. V. Koroleva, 11 pp. RUSSIAN, per, <u>Arkhiv Anatomii Gistologii i Embriologii,</u> Vol XLVI, No 2, 1964, pp 36–42, JPRS 24341

Tasks of Soviet Anthropology In the Study of the Morphofunctional Characteristics of the Human Organism, by V. V. Glazgurg, 5 pp. RUSSIAN, per, Arkhiv Anatomit, Gistologii I Embriologii, Vol XLVI, No 3, 1964, pp 3-6. TDBS 24444

Ambropologicas Aspects of Cytology, Histology, and Embryology, by A. G. Knoppe, 16 pp. RUSSIAN, per, Arkhiv Anatomii, Gistologii i Embriologii, Vol XLVI, No 3, 1964, pp 7-18, JPRS 24484

Correlation of Social and Biological Factors in the Structure of the Osseous System, by M. G. Prives, 14 pp.
RUSSIAN, per, <u>Arkhiv Anatomit</u>, <u>Cistologii i Embriologii</u>, <u>Yol XLVI</u>, No 3, 1964, pp 19-27.
JPRS 24484

Soil Compaction Under a Rolling Wheel, by A. Polerayev, RUSSIAN, per, Av <u>Junchil i Fraktornaya Prom</u>, No 8, 1902, pp 1-5. CSIRO/No 6461

Congress of Azerbaydzhan Medical Specialists, by B. Medzhidov, 8 pp. RUSSIAN, per, Azerbaydzhaniskiy Medir Zhur, No. 12, 1963 Dec, pp. 72-75.
JPRS 24474

Some Physico Chemical Aspects of Single Strand Desexyribonucleic Acid DNA, by N. I. Ryabchenko, D. M. Spitkovskiy, et al, 14 pp. RUSSIAN, per, Biofizika, Vol VIII, No 1, pp 1963, pp 19-27.

JPRS 24070

Interpretation of Nucleotide Sequence in Conveying Ribonucleic Acids, by V. G. Tumanyan, L. L. Kiselev, 11 pp.
RUSSIAN, per, <u>Biofizika</u>, Vol VIII, No 2, 1963, pp 147-153.
JPRS 24086

The Theory of Spiral-to-Ball Transitions in Blopolymers. IV. The Scattering of Light and X-Rays by Blopolymer Molecules in the Spiral-to-Ball Transition Region, by B. A. Fedorov, T. M. Birshteyn, et al, 11 pp. RUSSIAN, per, <u>Blofizika</u>, Vol VIII, No 3, 1963, pp 288-293, JPRS 24261

Optical Properties and Molecular Structure of Nucleic Acids and Their Components. II. Spectroscopic Invostigation of the Spiral-to-Ball Transition in DNA at Different Temperatures and pil, by B. I. Sukhorukov, Yu. Sh. Moshkovskiy, et al, 12 pp. RUSSIAN, per, Biofizika, Vol VIII, No 3, 1963, pp 294-300. JPRS 24261

Application of Mathematical Methods for Investigation of Impulse Activity of Central Neurons of the Brain, by N, N, Preobrazhenskly, N, V, Yarovitskiy, 14 pp. RUSSIAN, per, <u>Biofizika</u>, Vol VIII, No 3, 1963, pp 387-393. JPRS 24261

On the Problem of Correlation Among Neighboring Amino Acid Radicals in Protein Molecules, by V. Yu. Urbakh, 9 pp. RUSSIAN, per, <u>Biofizika</u>, Vol VIII, No 5, 1963, pp 536–542.
JPRS 24046

Peculiarities of the Electron Paramagnetic Resonance Spectra of Amino Acids and Proteins Under the Action of Ultraviolet Light, by O. A. Azizova, 6 pp. RUSSIAN, per, <u>Bloftzika</u>, Vol VIII, No 5, 1963, pp. 556–560. JPRS 24046

Evaluation of the Flexibility of DNA Molecules by Means of Light Scattering at Large Angles, by O. B. Pittsyn, B. A. Fedorov, 10 pp. RUSSIAN, per, <u>Biofizika</u>, Vol VIII, No o, 1903, pp 059-063. JPRS 24250

Investigation of Continuous Models of Control Systems on Electronic Computer, by I. P. Lukashevich, 10 pp. RUSSIAN, per, <u>Biofizika</u>, Vol VIII, No 5, 1963, pp 715-721, JPRS 24256

Metachromatic Reaction of Nucleic Acids DNA and RNA, Native and Irradiated by Ultrasound, by F. 1. Braginskaya, I. Ye. El^apiner, 22 pp. RUSSIAN, per, <u>Biofizika</u>, Vol IX, No 1, 1964, pp 40-47. JPRS 24353

The Study of Bird Flight, by V. E. Yakobi, 10 pp. RUSSIAN, per, <u>Biofizika</u>, Vol IX, No 1, 1904, pp 118-121, JPRS 24357

Biology and Morphology of Hordoum L. Species, by F. Kh. Bakhteyev, RUSSIAN, per, <u>Botan Zhur</u>, Vol XXXIX, 1954, pp 112-118. NU/1 524

Development of Flower Buds of Ribes Nigrum L. Through Autumn and Winter, by A. Bobrysheva, E. Oknina, RUSSIAN, per, <u>Botan Zhur</u>, Vol XLVI, No 3, 1961, pp 377-386. CSIROLNO 6394

Scientific Biological & Medical Sciences (Contd)

Biochemical Classification of Piricularia Fungi - Producers of Physiologically Active Substances, by V. I. Kefeli, 18 pp. RUSSIAN, per, Botan Zhur, Voi XLVII, No 9, 1962, pp 1318-1326. 9692412 US Army Biol Lab Tr No 879

The Role of Modern Botany in Building a Communist Society, Raising the Level of Agriculture and Medicine in the USSR, andthe Principal Tasks Facing it, by V. N. Sukachev, A. A. Fedorov. RUSSIAN, per, Boran Zhur, Vol XLIX, No 2, 1964, pp 161-176. 9222258 USDA Tr A-1442

Heterosis and Its Significance for the Development of Vegenble-Crop Breeding (a Survey of Literature), by F. A. Tkachenko, RUSSIAN, per Botan Zhur, Vol XLIX, No 2, 1964, pp 280-286, 9222259 USDA Tr A-1443

Use of Automatic Logical Devices for Medical Monitoring, by R. M. Bayevskiy, Ye. A. Zil³bertal, et al, 9 pp. RUSSIAN, per, <u>Byul Eksper Biolog i Medit</u>, Vol VI, No 8, 1963, pp 116-120. JPRS 24121

Functional Disturbances of the Liver of Strontium-90 Affected Dogs, by A. A. Yusupov, A. I. Nevskaya, et al, 8 pp. RUSSIAN, per, Byull Eksper Biol 1 Medit, No 2, 1904, pp 29-33, JPRS 24301

Dynamics of White Blood Response to Irradiation, by 1. K. Petrovich, Yu. I. Moskalev, 8 pp. RUSSIAN, per, <u>Byull Eksper Biol 1 Medit</u>, No 2, 1964, pp 33–37. JPRS 24301

Effect of Single Local Irradiation on the Peripheral Blood Vessels and Their Reaction to the Administration of Adrenatin, by O, V. Mikhaylova, 6 pp. RUSSIAN, per, <u>Byull Eksper Biol 1 Medit</u>, No 2, 1964, pp. 38-40. JPRS 24301

Changes in the Immunological Condition of the Organism During the Action of Carcinogenic Chemical Agents, by D. D. Shapiro, I, Ya. Getmants, 7 pp. RUSSIAN, per, <u>Byull Eksper Blol I Medit</u>, No 2, 1964, pp 93–97. JPRS 24301

Effect of Ultra-High Frequency Magnetic Field on the Electric Activity of the Neuronally isolated Cerebral Cortex Band, by Yu. A. Kholodov, 7 pp. RUSSIAN, per, Byull Eksper Biol ! Medit, No 2, 1964, pp 98-101.

JPRS 24301

Possibility of Formation of Anti-Antibodies and Their Effect on the Survival Time of Skin Homotransplants, by L. M. Okuneva, o pp.
RUSSIAN, per, Byul! Eksper 1910 i Medit, No 2, 1964, pp 104-107.
JPRS 24301

Transistorized Device for Radiotelemetric Recording of the Frequency of Cardiac Contractions, Respiration and Movements, by R. V. Unzhin, V. V. Rozenblat, 7 pp. RUSSIAN, per, Byull Eksper Biol i Medit, No 2, 1964, pp 117-121.

JPRS 24301

Fortuitous Sertement of Bullheads and Aterina in the Aral Sea and Their Relationship With Acclimatized and Native Fish Species, by N. Ye. Bykov, il pp. RUSSIAN, per, Byul Moskov Obshch Isputateley Prirody, Ordel Biolog, Vol LXIX, No 1, Jan, Feb 1964, pp 51-58. JPRS 24184

Initial Plant Material in Breeding Winter Sheat for Resistance to Lodging, by E. S. Strutsovskaya. RUSSIAN, per, Byul Vses Inst Rastenlevod, Vol IX, 1961, pp. 44-47. 9222249 USDA Tr A-1433

Activity of Carbohydrase in the Soil, by A. Sh. Galstyan. RUSSIAN, per, <u>Dok Ak Nauk Armyanskoj SSR</u>, Vol XXXII, No 2, 1961, pp 101-104. NZDIA

Podzolization and Illimerization, by E. M. Fridland. RUSSIAN, per, <u>Dok Ak Nauk SSSR</u>, Vol CXV, 1957, pp 1006-1009. GB/25

Enzyme Activity and the Intensity of Respiration of Soil, by A. Sh. Galstyan. RUSSIAN, per, <u>Dok Ak Nauk SSSR</u>, Vol CXXVII, No 5, 1959, pp 1099-1102. NZDIA

Cybernetic Control of the Reversible Hypothermy Process, by Ye. V. Maystrakh, 1. V. Yeremenko, et al, 8 pp. RUSSIAN, per, <u>Dok Ak Nauk SSSR</u>, Vol CLI, No 3, 1963, pp 714-717, JPRS 24504

The Study of Callus Formation in Several Shrubs and Woody Speces by Tissue Culture in Vitro, by E. A. Bychenkova. RUSSIAN, per, <u>Dok Ak Nauk USSR</u>, Vol CLI, No 3, 1963, pp 732-736. 9222254
USDA Tr A-1438

The Effect of Heavy Water on DNA and Protein Properties, by V. V. Grechko, R. N. Maslova, et al., 6 pp. RUSSIAN, per, <u>Dok Ak Nauk SSSR</u>, Vol CLII, No 3, 1963, pp 740-743. JPRS 24050

Effect of Sarcolysin on the Life Cycle of Ehrlich's Ascite Carcinoma, by O. S. Frankfurt, 6 pp. RUSSIAN, per, <u>Dok Ak Nauk SSSR</u>, Vol CLIII, No 4, Dec 4963, pp 930-932.

JPRS 24048

Effect of Injection of Bone Marrow Cells Upon Morphological Manifestations of Experimental Influenza in Irradtated Animals, by N. A. Maksimovich, O. P. Lebedeva, 8 pp. RUSSIAN, per, <u>Dok Ak Nauk SSSR</u>, Vol CLIII, No 4, 1903, pp 950-953. JPRS 24050

The Mutagenic and Antimutagenic Action of Sodium Gallate, by V. A. Baraboy, G. S. Yukova, 5 pp. RUSSIAN, per, Dok AK Nauk SSSR, Vol. CLIII, No 5, 1963, pp. 1193, 1194.

JPRS 23787

Postradiation Restoration of Yeast Cells Irradiated Under Aerobic and Anaerobic Conditions, by V. S. Barsukov, O. V. Malinovskiy, et al, 5 pp. RUSSIAN, per, <u>Dok Ak Nauk SSSR</u>, Vol CLIII, No 5, 1963, pp. 1199–1201.

JPRS 23945

Scientific <u>Biological & Medical Sciences</u> (Contd)

Two Fusion Thresholds of Light Stimuli in the Visual Analyzor of Man, by M. I. Venslauskas, A. M. Gutman, 5 pp. RUSSIAN, per, <u>Dok Ak Nauk SSSR</u>, Vol CLIII, No 5, 1963, pp 1202, 1203.

JPRS 23946

The Effect of Radiation Inactivation of Nuclei on the Synthesis of Informational Ribonucleic Acid in Embryos of Fish Misgurnus Fossilis, by N. V. Belitsina, L. P. Gavpilova, et al, 6 pp. RUSSIAN, por, Dok Ak Nauk SSSR, Voi CLIII, No 5, 1963, pp 1204-1206.

JPRS 23944

Interaction Mechanisms of Specific and Non-Specific Brain Structures, by R. A. Durinyan, A. G. Rabin, 5 pp. RUSSIAN, per, <u>Dok Ak Nauk SSSR</u>, Vol CLIII, No 5, 1963, pp 1213-1215. JPRS 23947

Structure of Blood Group Substances Hydroxylaminolysis of Blood Group Substance and General Structure of the Blopolymer, by N. K. Kochetkov, S. G. Kara-Murza, et al., 7 pp. RUSSIAN, per, Dok Ak Nauk SSSR, Vol CLIII, No 6, 1963, pp. 1338-1341.

JPRS 24141

New Psychopharamacological Preparations, by V. V. Zakusovof, 29 pp. RUSSIAN, per, <u>Farmakol 1 Toksikol</u>, Vol XXVII, No I, Jan, Feb 1964, pp 107-121.

JPRS 24475

Pharmacological Analysis of Primary Responses From the Cortex of the Cerebral Large Hemispheres in Ontogenesis, by O. G. Baklavadzhan, F. A. Adamyan, 12 pp. RUSSIAN, per, <u>Fiziol Zhur SSSR Iment I. M. Sechenova</u>, Vol L, No 2, 1964, pp 145-152, JPRS 24245

Evaulation of the Functional Proporties and Responses From Individual Neurons of the Central Nervous System, by G. A. Vartenyan, N. N. Vasilevsky, 14 pp. RUSSIAN, per. Fiziol Zhu. SSSR Iment I. M. Sechenova, Vol 1., No 2, 1964, pp 153-160. JPRS 24245

Apparatus for Delivery of Pure Oxygen and the Measurement of Its Consumption in Chronic Experiments With Small Animals, by I, S, Breslav, 9 pp.
RUSSIAN, per, <u>Fiziologicheskiy Zhur SSSR</u>, Vol XLIX, No 9, 1963, pp III6-II26. 9692328
FTD-TT-63-III8

Multiple Electrode Implantation Into Subcortical Structures of the Human Brain, by K. V. Grachev, 9 pp. RUSSIAN, per, <u>Fiz Zhur SSSR</u>, Vol XLIX, No 9, 1903, pp 1122-1125. 9692322 FTD-TT-63-1119

Fasks of the Society of Hygienists In Connection With the Decisions of the July Plenum of the Central Committee, Communist Party Soviet Union, by F. G. Krotkov, 15 pp.
RUSSIAN, per, <u>Gleivena I Sanitariya</u>, Voi XXIX, No 1, 1904, pp 3-11.
JPRS 23898

Concerning the Occupational Hazards in Working With Medical UHF Oscillators, by I. Ye. Varin, 13 pp. RUSSIAN, per, <u>Giglyena i Sanitarlya</u>, Vol XXIX, No 1, 1964, pp 28-34. JPRS 23898

Some Problems in Radiation Protection During Therapeutic Administration of Radioactive Iodine, by M. I. Yenikeysv, 9 pp. RUSSIAN, per, Gigiyena i Sanitariya, Vol XXIX, No 1, 1964, pp 44-49.

JPRS 23898

Staff Reinforcement of Santtary Epidemiological Stations an Urgent Task According to Annual Reports of the RSFSR Santtary Epidemiological Stations for 1961 and of Local Inspections, by P. A. Vavilin, N. I. Gavrilov, 6 pp. RUSSIAN, per, Giglyena i Santtariya, Vol XXIX, No 1, 1964, pp 74-77.

JPRS 23898

Toxicology of Organic Peroxides, by L. A. Tiunov, 9 pp. RUSSIAN, per, Giglyona i Sanitariya, Vol XXIX, No 1, 1964, pp 82-87.

JPRS 23898

Changes in the Strontium-90 Content of Food Products After Cooking, by Z. V. Dubrovina, O. M. Belova, 5 pp. RUSSIAN, per, Gig i Sani, No 2, 1964, pp 40-43. JPRS 24139

The Effect of Strontlum ⁸⁹ on the Microtiora of Biological Pilters, by B. N. Il¹yin, 5 pp. RUSSIAN, per, <u>Gigtyena i Sanitariya</u>, No 2, 1964, pp 102-104.

Electron-Microscopic Study of Soil Suspensions, by D. I. Nikitin, S. B. Stefanov. RUSSIAN, per, 12 Ak Nauk Ser Biol, No 2, 1903, pp 283-285, 9222260 USDA Tr A-1444

The State of Weightlessness and Artificial Gravity, by 1, 1, Kaslyan, V, 1, Kopanev, 25 pp. RUSSIAN, per, 12 Ak Nauk SSSR, Serlya Biol, No 6, 1963, pp 880–891, 9692295 PTD-TT-64-140

Physiological Reactions of Cosmonauts During the Action of G-Loads and Weightlessness, by V. I. Yazdovskiy, I. I. Kas'yan, et al, 21 pp. RUSSIAN, per, Iz Ak Nack SSSR, Seriya Biolog, Vol XXIX, No 1, 1964, pp 12-31.

JPRS 23917

Dynamics of Hemocircular Parameters of the Cerebral Vascular System With Reference to Longitudinal Gravitation Loads, by Yu. E. Moscalenko, O. G. Gazenko, et al. RUSSIAN, per, Iz Ak Nauk SSSR, Ser Biolog, No 2, 1964, pp 280-297.

*FTD-TT-64-534

On Neuroemotional Stress of Cosmonauts During Cosmic Flight, by V. I. Yazdovskiy. RUSSIAN, per, Iz Ak Nauk SSSR, Ser Biolog, No 2, 1904, pp 300-31.
*FTD-TT-64-534

Symposium on Applied Microbiology in Sweden, Stockholm, by E. N. Mishustin, N. D. Iyerusalimskiy. RUSSIAN, per, IZ Ak Nauk SSSR, Ser Biolog, No 2, 1904, pp 325-331. *FTD-TT04-534

Amino Acid Composition of Products of the Fractionation of Collagen of the Dermis of Mammals, by A. A. Denisov, et al, 9 pp. RUSSIAN, per, Iz Yysshikh Ucheb Zaved, Tekh Lenkov Prom, No 2, 1959, pp 69-75. NII 3-7-64

Scientific Biological & Medical Sciences (Contd)

The Use of Ultrasound in the Diagnosis of Aneurysm, by D. I. Tsurupa, V. M. Sitenko, et al, li pp. RUSSIAN, per. Khirursiya, Vol XL, No 1, 1964, pp 93-98.
JPRS 23937

The Results of Utilization of Capron Net in Surgery, by N. Z. Monakov, 10 pp. RUSSIAN, per, Khirurgiya, Vol XL, No 1, 1964, pp 98-103.
JPRS 23937

The Use of Blood Substitutes in Surgery, by D. M. Grozdov, A. Ye. Kisclev, 9 pp. RUSSIAN, per, <u>Khirurgiya</u>, Vol XI., No 1, 1964, pp 104-109.
JPRS 23973

Allopiasty in Resection of the Liver, by R. V. Bogoslavskiy, I. Ye. Prokopenko, 11 pp. RUSSIAN, per, Khirurgiya, Zhur Imeni N. I. Pirogoya, Vol XL, No 3, 1964, pp 9-15.
JPRS 24343

Teaching of Surgery in a Medical Institute, by B. A. Korolov, 9 pp. RUSSIAN, per, Khirurgiya, Zhur imeni N. I. Pirogova, Vol XL, No 3, 1964, pp 114-117. JPRS 24344

All Union Symposium on the Use of Muscle Relaxants, by S. M. Zol¹nikov, O. D. Kolyutskaya, 11 pp.
RUSSIAN, per, <u>Khirurgiya, Zhur imeni N. 1.</u>
<u>Pirogova</u>, Vol XL, No 3, 1964, pp. 135-140.
JPRS 24342

Some Problems of Contemporary Philistology, by F. A. Mikhaylov, 7 pp. RUSSIAN, per, <u>Klin Med</u>, Vol XIAI, No 3, 1964, pp 5-9, JPRS 24424

Achievements in Electronics and Problems of Clinical Medicine, by V. Kh. Vasilenko, M. A. Zhukovskiy, 10 pp. RUSSIAN, per, <u>Klin Med</u>, Vol XIII, No 3, 1964, pp 9-15. JPRS 24425

Nomenclature and Classification of Diseases of the Cardiovascular System of Neurogenic Origin, by N. N. Sawitskiy, 8 pp. RUSSIAN, per, <u>Klin Med</u>, Vol XLII, No 3, 1964, pp 20-25. JPRS 24423

Electric Stimulation of the Heart, by V. B. Votchal, P. M. Girikhidi, et al, 5 pp. itUSSIAN, per, <u>Klintsheskaya Medit</u>, Voi XLIII, No 2, 1964, pp. 124-125. J PRS 24083

Chemoreception of Insects and Ticks, by Ye. Kh. Zolotarev, Yu. A. Yeltzarov, 14 pp. RUSSIAN, per, Medit Parazitol i Parazit Bolezni, No 1, 1964, pp 47-53. JPRS 23925

The Present State of the Helminthiasis Morbidity Rate and the Control Measures in the Control Regions of the RSFSR, by N. S. Titkov, 12 pp. RUSSIAN, per, Medit Parazitol i Parazit Bolezni, Vol XXXXII, No 1, 1964, pp 74-81.

JPRS 23885

The Distribution of Diphyliobothriasis in the Lower Reacies of the Yendsey and the Role of Lake Fish in the Infestation of Humans With Diphyllobothrium Latim, by I. F. Kozminskaya, 8 pp. RUSSIAN, per, Medit Parazitol i Parazit Bolezni, Vol XLII, No 1, 1964, pp \$2-86. JPRS 23900

The Condition of Carconomatous Laryngeal Mucosa After X-Ray Therapy, by S. N. Lapchenko, 8 pp. RUSSIAN, per, Medit Radiolog, Vol IX, No 2, 1964, pp 22-28.

JPRS 24452

Case of Radiation Sickness from Internal Irradiation, by Ye. 1. Safronov, 11 pp. RUSSIAN, per, Medit Radiolog, Vol IX, No 2, 1964, pp 64-71.

JPRS 24452

Temperature Reaction to Irradiation in Monkeys, by N. A. Volokhova, 8 pp. RUSSIAN, per, Medit Radiolog, Vol IX, No 2, 1964, pp 75-80. JPRS 24452

Serum Prophylaxis and Therapy of Bacterial Intoxications in Irradiated Animals, by D. R. Kuulen, T. I. Bulatova, 7 pp. RUSSIAN, per, Medit Radiolog, Vol IX, No 2, 1964, pp 80-84.

JPRS 24452

The Use of Cybernetics in the Development of Radiation Therapy, by I. O. Kruglyakov, L. D. Lindentraten, et al, 12 pp. RUSSIAN, per, Medit Radiolog, Vol IX, No 2, 1964, pp 94-99.

JPRS 24452

Classification of Radiation Sickness, by G. D. Baysogolov, A. K. Gus'kova, 11 pp. RUSSIAN, per, Medit Radiolog, Vol IX, No 2, 1904, pp 100–103.
JPRS 24452

All-Russian Conference of Public Health Workers, by P. P. Obnorskiy, 5 pp. RUSSIAN, per, <u>Medit Sestra</u>, No 12, 1903, pp 3-5. JPRS 24248

About Microorganisms in Permatrost, by A. Ye, Kriss, 15 pp. RUSSIAN, per, <u>Mikrobiologiya</u>, Vol IX, No 9, 10, 1940, pp. 879-887, 9692365 PTD-TT-63-929

The Lag Phase and Oxidation-Reduction Potential in Cultures of Anaerobes, by I. L. Rabotnova, N. A. Pryanishnikova, 8 pp. RUSSIAN, per, <u>Mikrobiologiya</u>, Vol XXIV, No 0, 1955, pp 671-676. 9692410 US Army Biol Lab Tr No 841

A Study of the Microflora of Gamma Irradiated Products, by F. S. Api, N. N. Mazokhina, 6 pp. RUSSIAN, per, Mikrobiologiya, Vol XXXIII, No 1, Jan. Feb 1904, pp 107-171.

JPRS 24187

Biological Sciences in the Light of the November Plenum of the Communist Party CPSU, 6 pp. RUSSIAN, per, Nauch Dok Vyssh Shkoly, Biol Nauki, No 2, 1903, pp 7-11.

JPRS 24246

Increase in Toxicity With a Decrease in the Concentration of Poison, by N. A. Tamarina, 8 pp. RUSSIAN, per, Nauch Dok Vyssh Shkoly, Seriya Biolog Nauki, No 2, 1963, pp 12-16. JPRS 24120

Chemistry, Plants and the Harvest, by S.S. Andreyenko, 6 pp. RUSSIAN, per, Nauct Dok Vysshey Shkoly, Biolog Nauki, No 1, 1904, pp 7-10. JPRS 24290

Scientific Biological & Medical Sciences (Contd)

The Spatial Orientation of Animals and the Problem of Controlling Their Behavior, by N. P. Naumov, G. N. Simkin, et al, 10 pp. RUSSIAN, per, Nauch Dok Vysahev Shkoly, Biologi Nauki, No 1, 1964, pp 11-17. JPRS 24290

On the Presence of Inspiratory and Expiratory Neurons in the Respiratory Center of Fish, by Ts. V. Serbenyuk, L. B. Nerseyan, 8 pp. RUSSIAN, por, Nauch Dok Vysshey Shkoly, Biologt Naukt, No 1, 1964, pp 56-61.
JPRS 24290

Reaction Mechanisms in a Shift in Electro-Encophatogram Rhythm III. Analysis of Harmondc and Subharmonte Reactions, by A. Ya. Supin, 7 pp. RUSSIAN, per, Nauch Dok Vysshe Shkoly, Biologt Naukt, No 1, 1964, pp 68-72. JPRS 24290

On the Disruption of Plant Metabolism Caused by Treating Socds With Radioactive Substances, by G. V. Il'ina, N. N. Kuznetsova, et al, 7 pp. RUSSIAN, per, Nauch Dok Vyssle Sikoly, Biologi Nauki, No 1, 1964, pp 92-95. JPRS 24290

On the Effect of Lime, Phosphates and Stable Strontium on the Accumulation of Strontium 90 in Plants, by N. M. Skadchenko, 5 pp. RUSSIAN, per, Nauch Dok Vysshey Shkoly, Biologt Naukt, No 1, 1904, pp 90-98.

JPRS 24290

The Separation of the Chlorelia Antagonisis From the Soil, by B. V. Gromov, N. N. Kameshkova, 6 pp. RUSSIAN, per, Nauch Dok Vysshe Shkoly, Biologt Nauki, No 1, 1964, pp 171-174, JPRS 24290

The Physiological Activity of Generative Organs and the Plant Reaction to Self-Pollination, by 1, M. Molchan, 8 pp. RUSSIAN, per, Nauch Dok Vysah Shkoly, Biologi Nauki, No 1, 1964, pp 175-179.
JPRS 24290

iBlocenosIs of the Ground Fauna of the Bering Sea, by Z. A. Filatova, A. A. Neyman, 9 pp. RUSSIAN, per, <u>Okeanologiya</u>, Voi III, No 6, 1963, pp 1079-1084.
JPRS 24313

Ultrasonic Therapy of Arthrosis Deformans of the Knee Joint, by V. I. Rokityanskiy, 8 pp. RUSSIAN, per, Orteped, Travmato i Protezirovaniye, Vol XXV, No i, 1964, pp 3-7.

*PRS 24155

The Metabolism of Certain Trace Elements in the Long Tubular Bones in General Skeletal Disease, by M. G. Belan, B. A. Zadorozhnyy, 15 pp. RUSSIAN, per, Ortoped, Traymato i Protezirovaniye, Vol XXV, No 1, 1964, pp. 4f-48.

JPRS 24155

Malformations and Abnormalities of Ticks of the Superfamily of ixodoidea, by E. Pavlovskiy, RUSSIAN, per, <u>Parazitologicheskii Sbornik</u>, Vol VII, 1940, pp 7-44. CSIRCYNO 6362

Possibility of Prolonging the Life Span of Skin Homotransplants of Rabbits by Means of Alkylating Substances, by V. I. Popov, M. M. Nezdatnyy, 5 pp. RUSSIAN, per, Patolog Fiziol i Eksper Terapiya, Vol Vilt, No. 1, Jan, Feb 1904, pp. 37-39. JPRS 24296

On the Problem of Heart Diverticulum, by M. M. Vass, 12 pp.
RUSSIAN, per, <u>Pediatriava</u>, Vol XXXVIII, 1960, pp 84-87.
Navy Tr 3769/NMS 859

A Protein-Like Polymer, by V. G. Debabov, V. A. Shibnev. RUSSIAN, per, <u>Priroda</u>, No 10, 1963, pp 32-35. *ACSI 1-4447 ID 220-4010064 525th MI Gp

Predators of the Sea and Their Commercial Catches, by N, V. Parin, 7 pp. RUSSIAN, per, <u>Priroda</u>, No !2, 1963, pp 62-68. JPRS 24298

Control of Agricultural Pests, by M. F. Yaroshenko, A. A. Spasskly, 5 pp. RUSSIAN, per, <u>Priroda</u>, No 12, 1963, pp 75-79, JPRS 24299

Chemistry of Brain Function, by N. I. Grashchenkov, 11 pp. RUSSIAN, per, <u>Priroda</u>, Vol XIII, No 2, 1964, pp 10-17. JPRS 24151

Development of General Hematology, by V. Scraffmov-Dimitrov, 7 pp. RUSSIAN, per, <u>Problemy Genatolog Pereltvan Krovi</u>, Vol X, No 2, 1964, pp 3-8. JPRS 24388

Blood System Changes in Longevity, by N. N. Klpshidze, M. V. Tordiya, et al, 8 pp. RUSSIAN, per, <u>Problemy Genatolog 1 Perelivan</u> Kroyi, Vol X, No 2, 1964, pp 32-36. JPRS 24388

Plasma Protein Fractions Following Replacement of Lost Blood With Polyglucin, by V. B. Koziner, N. D. Papush, 12 pp. RUSSIAN, per, <u>Problemy Gematologil 4 Pereliyaniya</u> Kroyi, Vol X. No 2, 1904, pp 37-44. JPRS 24118

Anticoagulant Effect in Infusions of the Protein Blood Substitute BK-8, by D. G. Petrov, B. T. Savkiv, 9 pp. RUSSIAN, per, Problemy Gematologii I Pereliyaniya

RUSSIAN, per, <u>Problemy Genatologii 1 Perclivaniya</u> Krovi, Vol X, No 2, 1964, op 44-48. JPRS 24118

Histochemical and Functional Study of Reffculo-Entothelial System in Experimental Animals Following the Infusion of Blood Expander Solution of Polyvinol, by Z. A. Chaplygina, V. P. Teodorovich, 11 pp.

RUSSIAN, per, Problemy Gematologii + Perelivaniya Krevi, Vol X, No 2, 1904, pp 48-52.

JPRS 24118

Characteristics of the Amino Acid Composition of the Protein Hydrolyzate Tsolipk, by K. Yu. Yuldashev, A. M. Kharat'yan, et al, 8 pp. RUSSIAN, per, <u>Problemy Gematelogii i Pereliyaniya Krovi</u>, Vol X, No 2, 1964, pp 52-55.

JPRS 24118

Radioactive Contamination of Fish, by G. V. Federova. RUSSIAN, per, <u>Rybnoye Khozyaystvo</u>, No 3, 1962, pp 25-28.

Equipment for Simultaneous Recording of Entry of Water late the Root System of a Plant, of Transpiration and of Changes in the Weight of the Green Mass, by O. Ivanov.
RUSSIAN, per. Shornik Tradov Acron Fiz. No. 9

RUSSIAN, per, Shornik Tradov Agron F12, No 9, 1962, pp 180-187. CSIRC/No 6359 Scientific
Biological & Medical Sciences (Contd)

Economic Losses due to Foot-and-Mouth Disease(FMD)₃ by S. Poplaukhin, RUSSIAN, per, Sel'akoe Khozyaistvo Sibiri, No 4, 1961, pp 51, 52, 9222015 USDA Tr A-1429

Achievements of Medical Workers Reviewed, by N. N Grigor[†]yeva, 10 pp. RUSSIAN, per, <u>Sovet Zdravookh</u>, No 1, 1964, pp 3-8. JPRS 24248

All-Russian Conference on Public Health, by A. N. Mamedov, 9 pp. RUSSIAN, per, <u>Sovet Zdravookh</u>, No 1, 1964, pp 81-84. JPRS 24248

The Third Ukrainian Conference on the History of Medicine, by K. F. Duplenko, 8 pp. RUSSIAN, per, Sovet Zdravookh, No 1, 1964, pp 86-88, JPRS 24248

The Present State and Ways of Developing Specialized Medical Aid in the USSR, by A. G. Safonov, 12 pp. RUSSIAN, per, Sovet Zdravookh, Vol XXIII, No 2, 1964, pp 3-10.

JPRS 23914

The Problem of Organization of Specialized Aid to the Regal Population, by V. A. Voroblyev, 5 pp. RUSSIAN, per, Sovet Zdravookh, Vol XXIII, No 2, 1964, pp 11-13. JPRS 23914

Epizootiology of Foot-and-Month Disease (FMD) in the Azerbatjan SSR, by I. I. Manatov, N. A. Baboshma. RUSSIAN, per, Trudy Azerbatdzhanskij Nauch-Issied Yeterharmyi Institut, Vol XIII, 1962, pp 5-45, 9222257 USDA Tr A-1441

Feeding and Food Relationships of Predatory Fishes in the Northern Part of the Rybinsk Reservoir, by E. S. Zadul'skaya, 57 pp. RUSSIAN, per, Trudy Daryinskogo Gosudarstvennogo Zapovednika, No 6, 1960, pp 345-405. 9221960 OTS 63-IU27 PL-480

Effect of Temperature on the Embryonic Development of the Pike, the Blue Bream (Abramia Ballerus L.), and The White Bream (Blieca Bjoerkna L.), by Y, M, Volodin, 7 pp. RUSSIAN, per, Trudy Inst Biologii Vodokhranilishch, Vol III, No 6, 1960, pp 231-237. 9221971 OTS 03-11125 PL-480

Role of the Receptors of the Body Surface in the Mechanism of the Reaction of Fish to Electric Currents, by N. V. Bodrova, B. V. Krayukhin, 8 pp. 8 pp. RUSSIAN, per, <u>Trudy Inst Biologii Vodokhranilishch</u>, Vol III, No 6, 1960, pp 266-272, 9221967 OTS 63-1111 PL-480

Plantation of Seedlings of Wood Species Under Electric Illumination, by V. M., Leman, 9 pp. RUSSIAN, per, <u>Trudy Inst Fiziologii Rastenii</u> Im K. A., <u>Timiryazeva Ak Nauk SSSR</u>, Vol X, 1955, pp 91-100, 9221968 OTS 03-11034 PI.-480

Experimental Industrial Preservation With Sodium Pyrosulfite of Caspian Sprat for Production of Feed Meal, by S. V. Yezerskiy, 25 pp. RUSSIAN, per, <u>Trudy Institut Ikh i Ryh Khoz Ak</u> Nauk Kazak SSR, Vol IV, 1963, pp 211-233. JPRS 24182

Chemoreception in Crustaceans. Report No 1: Variability in the Cehmoreception of Amphipods (Gammarus Locusta and G. Lacustris), by A. N. Zubov, 6 pp.
RUSSIAN, per, Trudy Inst Murmanskogo Morskogo Biologicheskogo Ak Nauk SSSR, Vol II, No 6, 1960, pp 245-252, 9221965
OTS 69-11164
PL-480

Some Problems of the Design and Application of Anesthesia Apparatuses, by A. S. Perel mutr, 24 pp. RUSSIAN, por, Trudy Institut Yses Nauch Issied Institut Medit Instrument 1 Oborud, No 1, 1963, pp 4-24, JPRS 24264

Anosthosia With Ether and Fluethane With the Aid of Thermocompensating Vaporizers of the All-Union Scientific Research Institute of Medical Instruments and Equipment, by V. M. Yurevich, 7 pp. RUSSIAN, per, Trudy Institut Vses Nauch Issled Institut Medit Instrument I Oborud, No 1, 1963, pp 27-32.

JPRS 24254

Dosimeters for Volatile Liquid Anesthetic Substances, by R. I. Savachenko, 28 pp. RUSSIAN, per, Trudy Institut Vses Nauch Issled Institut Medit Instrument i Oborud, No 1, 1963, pp 41-64. JPRS 24264

Apparatus RO 62 for Artificial Respiration, by M. K. Soms, Yu. S. Gallperin, 10 pp. RUSSIAN, per, <u>Trudy Institut Vses Nauch Issled Institut Medit Instrument I Oborud</u>, No 1, 1963, pp 83-91.

Apparentia IK -62 for Artificially Inducing Coughing, by S. A. Clukhov, A. G. Trakster, 12 pp. RUSSIAN, per, <u>Trady Institut Vsep Nauch Issled Institut Medit Instrument i Oborud</u>, No 1, 1963, pp 92-101, JPRS 24264

Characteristics of Electro-Aerosols of Some Medical Solutions, by A. V. Kitayev, L. A. Smitmova, 10 pp. RUSSIAN, per, Trudy Institut Vses Nauch Issied Institut Nedit Instrument i Oborud, No 1, 1963, pp. 164-171. JPRS 24264

Rice, Critical Botanical Review of Species of Rice, by R. Yu. Rozhevits. RUSSIAN, per, <u>Trudy po Prikladnoy Botanike Genetike</u> 1 <u>Selektsfy</u>, Vol XXVII, 1931, pp 3-133. GB/25

Hybridization of Wild Ryc (Secale Cereals ssp. Segetale (Zhuk.) With Cultivated Varieties, by V. G. Tikhomfrov. RUSSIAN, per, <u>Trudy po Prik Botan Geneteke i Selektsii</u>, Vol XXXII, No 2, 1960, pp 259-270.

USDA Tr A-1436

Role of Sense Organs in the Feeding of Gilthead (Sargus Annularis L.) and Some Characteristics of its Schooling Behavior, by M. P. Aronov, 5 pp. RUSSIAN, per, <u>Trudy Sevastopol'skoi Biologicheskoi Stanteil, Ak Nauk SSSR.</u> Vol XIII, 1960, pp. 269-274.

OTS 63-11109 Pt.-480

Data on Accumulation Coefficients of P³², S³⁵, Sr⁹⁰, Y⁹¹, Cs¹³⁷, and Ce¹⁴⁴ in Martne Organisms, by G. G. Polikarpov, 20 pp.

RUSSIAN, per, Trudy Sevastopol Biol Stantsii, Vol XIV, 1961, pp 314-328. JPRS 24227

Use of Hydroacoustic Fish-Locating Techniques in the North Atlantic, by K. I. Yudanov, 5 pp. RUSSIAN, per, <u>Trudy Soveshchanii Ikhtiologicheskor Komissii Ak Nauk SSSR</u>, No 10, 1960, pp 230-234, 921974 O15 03-III26 P1, 480

Scientific Biological & Medical Sciences (Contd)

More in Relation to the Problem of Species and Species Formation in Microbiology, by N. N. Zhukov-Verezhnikov, I. N. Mayskiy, et al, 12 pp. RUSSIAN, per, Uspekhi Sovremennoy Biologii, Vol XXXIX, No 2, 1955, pp 243-252. 9692413 US Army Biol Lab Tr No 880

Detection of Antigens With the Help of Fluorescent Antibodies, by V. Ya. Shevlyagin, 13 pp. RUSSIAN, per, <u>Uspokhi Sovremennoy Biologii</u>, Vol XLV, No 2, 1958, pp 218-233, 9592411 US Army 13 ol Lab Tr No 852

Dynamic Biotelemetry, by V. V. Rozemblat, 34 pp. RUSSIAN, per, Uspekhi Sovremennoy Piologii, Vol LVI, No 3 (6), 1963, pp. 341-364. JPRS 23910

Work of the Pharmacology Division of the Institute of Experimental Medicine, Academy of Medical Sciences USSR, on Neuropharmacology, by S. V. Artichkev, 14 pp. RUSSIAN, per, Yest Ak Medit Nauk SSSR, No 11, 1961, pp 68-74, JPRS 23916

Contemporary State of Affairs in the Problems of Bone Homoplastic for Cranial Fornix Defects, by K. G. Anosova, 15 pp, RUSZIAN, per, Vest Khir Iment 1. I. Grekova, VOI LXXXIX, 1962, pp 86-92. Navy Tr 3767/NMS 857

The Function of the Auditory Analysior in the Light of Modern Biology, by V. I. Voyachek, 8 pp. RUSSIAN, per votation of the Auditory of the Post of t

X-Ray Roses Sustained During Prophylactic Flaorographical Examinations, by S. V. Pruzhanskiy, A. N. Krongauz, et al, 7 pp. RUSSIAN, per, Vest Rentgenol I Radiol, Vol XXXIX, No I, Jan Feb 1904, pp 54-59, JPRS 23930

Raising Hybrid Buckwheat Seeda, by I. N. Elagin, RUSSIAN, per, <u>Yest Sel¹skokh Nauk</u>, No 3, 1901, pp 45-50. 9222256 USDA 1r A-1440

Line Breeding With HeterosIs in Sugar Beet Selection, by T. F. Grin'ko, V. G. Peretyat'ko. RUSSIAN, per, <u>Vest Scl'skokhoz</u> Nauk, Vol VII, No 8, 1962, pp 43-49. 9222253 USDA Tr A-1437

Biological Theory of Plant Nutrition and Fertilization of Fields, by P. I. Krattn, 14 pp. RUSSIAN, per, <u>Vest Scl'skokhoz Nauk</u>, No I, 1964, pp 5-15. JPRS 24543

Irrigation With Fertilizers, by L. D. Fedorenko, 9 pp. RUSSIAN, per, <u>Vest Sch'skokboz Nauk</u>. No 1, 1964, pp 46-52. JPRS 24543

Agriculture in Guba, by Yu. A. Dudar¹, 6 pp. RUSSIAN, per, Yest Sel¹skokhoz Nauk, No 1, 1964, pp 139-144. JPRS 24543

Foliai Feeding of Potatoes, by V. P. Kiryukhin, 5 pp. RUSSIAN, per, <u>Vest Sel'skokhoz Nauk</u> No 2, 1964, pp 12-15, JPRS 23949.

- 5- -

Treating Cattle Infected With Foot-and Mouth Disease (FMD) With Bee Glue Ointment, by I. F. Kazakov, Yu. Sh. Abizarov, et al. RUSSIAN, per, Veterinariya, 1961, No 2, pp 37, 38, 9222016 USDA Tr A-1430

Foot-and-Mouth (FMD) Disease Virus Survival Time in Slaughtered-Cattle Producta, by S. G. Poplaukhin. RUSSIAN, per, Yeterinariya 1961, No 10, pp 70, 71, 9222017 USDA Tr A-1431

Complications After the Use of Glycerinated Crystal Violet Vaccine Against Hog Cholera, by I. P. Annenkov. RUSSIAN, per, Veterinariya Vol XL, No II, 1963, pp 38-43, 9222026 USDA Tr V-1898

In the Foot-and Mouth Disease Focus, by D. A. Bocharov, RUSSIAN, p. r., Veterinariya, Vol XL, No B, 1963, pp 63-65. 7222025

Summary of Results of Two Years Work of Producing and Inspecting Lapinized Foot-and-Mouth Disease Antigens of Types O, A, and S, by S, I, Voynov, M, B, Karpovich, RUSSIAN, per, Veterinariya, Vol XI., No II, 1963, pp 69, 70, 9222024 USDA Tr V-1900

Adaptation of the Foot-and-Mouth Disease Virus Type O to the Body of Adult Albino Mice. The Study of Immunoviological Propertirties of the Adapted FMID Virus, by Abdel Malek Butros Bulos. RUSSIAN, per, <u>Veterinariya</u>, V of XL, No 11, 1963, pp 71, 72, 9222023 USDA Tr V-1901

Review of the Epizootic Disease Situation in Various Countries in 1902, by Ya, R, Kovalenko, RUSSIAN, per, Veterinariya, Vol XL, No II, 1903, pp 77-79. 9222022 USDA Tr V-1902

Economic Effectiveness of Introduction of Chemical Processes Into Agriculture, by N. Baranov, 15 pp. RUSSIAN, per, <u>Yoprosy Ekon</u>, No 9, 1961, pp 102-110, JPRS 24199

Some Timely Problems In Social Psychology, by V. N. Kolbanovskiy, 14 pp. RUSSIAN, per, Voprosy Filosoffi, Vol XVII, No 12, 1903, pp 16-25. JPRS 24395

Modeling of Information and Programs in Complex Systems, by N. M. Amosov, 14 pp. RUSSIAN, per, <u>Voprosy Filosoff</u>, Vol XVII, No 12, 1963, pp 26-34. JPRS 24395

The Problem Requires Further Collective Investigations, by B. S. Ukraintsev, 10 pp. RUSSIAN, per, <u>Voprosy Filosom</u>, Vol XVII, No 12, 1903, pp 160-164.
JPRS 24395

Philosophical Investigations in the Problems of Engineering Psychology, by L. B. Itel'son, 5 pp. RUSSIAN, per, <u>Vopcosy Filosofn</u>, Vol XVII, No 12, 1903, pp 165–167. JPRS 24395

A study of Fish Population Dynamics on the Basis of a Fish Population Conceived as a Cybernetic System, by B. B. Mensburkin, 15 pp. RUSSIAN, per, <u>Voprosy Ikhttologin</u>, Vol IV, No 1G00, 1904, pp 23–33. JPRS 24431

Scientific Biological & Medical Sciences (Contd)

Theoretical and Practical Foundations of Artificial Breeding of Fish, by N. I. Kozhin, 9 pp. RUSSIAN, per, Voprosy Ekttologii, Vol IV, No 1(30), 1964, pp 92-96.

JPRS 24431

Effect of Prodators on the Young of Oncorhynchus Gorbusha Walb, and Oncorhynchus Keta Walb, in the White and Barents Seas, by E. L. Bakshtanskiy, 8 pp. RUSSIAN, per, Yoprosy Ikhtiologii, Vol IV, No 1(30), 1964, pp 136-141.

Survival of Some Enterobacterlaceae in the Digestive Tract of Fish and its Role in Sanitary Control of Water, by A. M. Guelin, 11 pp. RUSSIAN, per, Voprosy Ikhtiologii, Voi IV, No 1(30), 1954, pp 153-161.

JPRS 24431

The Effect of the Seasonal Factor on Toxicity Resistance of Fish, by V. I. Luktyanenko, B. A. Flerov, 8 pp.
RUSSIAN, per, <u>Voprosy Ikhitologfi</u>, Vol IV, No 1(30), 1954, pp 178-183.
JPRS 24431

A Discussion of the Problems of Acclimatization of Fishes and Their Food, by B. G. loganzen, 5 pp. RUSSIAN, per, Voprosy ikhalologii, Vol IV, No 1(30), 1904, pp 190, 107.

JPRS 24-31

The Relationship of Cybernetics to CHmatotherapy, by Ye. G. Kesel'brener, V. G. Boksha, et al, 9 pp. RUSSIAN, per, Voprosy Kurortologfi, Fizioteraphi, i Lechebnoy Fizicheskoy Kul'tury, No 5, Sep. Oct 1963, pp 404-410. JPRS 23854

Heat Exchange of Man In an Aqueous Medium, by G. B. Smolyanskly, 7 pp. RUSSIAN, per, Vojrosy Kurort Flziote 1 Lech Flz Kul'ury, Vol XXVIII, No 6, 1963, pp 517-521, JPRS 24174

Utilization of Proper Values for Estimation of the Functional Condition of an Organism, by V. F. Shubin, 8 pp. RUSSIAN, per, Voprosy Kurort Fiziote i Lech Fiz Kultury, Vol XXVIII, No 5, 1963, pp 521-526. JPRS 24174

Radon Hydrotherapy at Pyatigorsk Health Resort in the General Complex of Freatment Procedures for Children Recovering From Acute Politomyelitis Clinical and Electromyographic Data, by N. A. Semina, 8 pp.
RUSSIAN, per, Voltosy Kutort, Fiz i Lech Fiz Kud'ury, Vol XXIX, No 1, 1904, pp 19-23, JPRS 24020

Safety Precautions in the Preparation and Administration of Artificial Radon Hydrotherapy, by I. I. Gusarov, 13 pp. RUSSIAN, per, Voprosy Kurort, Fiz i Lech Fiz Kultury, Vol XXIX, No 1, 1964, pp 64-70.

Antibodies to the Specific Antigen of Tumor Cell Memorane, by B. D. Brondz, 9 pp. RUSSIAN, per, <u>Voprosy Onkologii</u>, Vol X, No 2, 1964, pp. 81-88.

JPRS 24181
The Biochemical Bases for Developing Products of Higher Biological Value, by A. A. Pokrovskiy, 27 pp.
RUSSIAN, per. Yobrosy Pitanaya, Vol XXIII. No.1

EUSSIAN, per, <u>Voictosy Pitaniya</u>, Vol XXIII, No l, Jane-Feb 1964, pp 3-16, 9692443 F 1D-14-64-148

- 15 -

Experimental Study of Surmonting Difficulties During Dynamic Work, by A. S. Egorov, 13 pp. RUSSIAN, per, YODYOBY PSIKHOLOG, Vol VIII, No 1, 1962, pp 19-27.
NIH 3-18-64

Perception and Memory of Speech During Natural Sleep, by A. M. Svyadoshch, 26 pp. RUSSIAN, per, Yoprosy Psikholog, Vol VIII, No 1, 1962, pp 65-80. NIH 3-9-64

Study of the Genetic Bases of Cell Immunity, by V. D. Solov'yev, N. Ye. Gulevich, et al, 8 pp. RUSSIAN, per, <u>Voprosy Virusologii</u>, Vol IX, No 1, 1964, pp 19-24, JPRS 23956

The Effect of Ionizing Radiation on the Reproduction of the Virus of Epidemic Parotitis in White Alice and Guinea Pigs, by A. G. Moroz, D. I. Ivanovskiy, 9 pp. RUSSIAN, per, Voprosy Virusologii, Vol IX, No 1, 1964, pp. 66-72.

JPRS 23956

Cellular Shifts in Lymph Nodes of Normal and Irradiated Animals Vaccinated Againist Influenza, by Ye. I. Sklyanskaya, O. P. Peterson, 9 pp. RUSSIAN, per, Voprosy Virusologii, Vol IX, No 1, 1904, pp 83-90. JPRS 23956

Microbes are Working for Man, by A. M. Bezborodov, 8 pp. RUSSIAN, per, <u>Zduroviye</u>, No 1, 1964, pp 6, 7. JPRS 24349

Work of Radfology Groups at Sanitation and Epidemiological Control Stations, by M. A. Sobolevskiy, 5 pp. RUSSIAN, per, Zdravookhraneniye Rosstyskoy Federatsii, No. 1, 1964, pp. 9-13.

JPRS 23815

Differential Molybdenum Medium for Plague and Pseudotuber culosis Bacteria, by N. Ye, Gubina, T. T. Voronina, et al., 5 pp. RUSSIAN, per, Zhur Mikrobiol, Epidemfol i Immunobiol, No 10, 1962, pp 12-15, 9692415 US Army Biol Lab Lr No 867

Active Immunity Against Gas Gangrene in Monkeys Under Conditions of the Acute Radiation Eesfect, by E. K. Dzhikidze, A. S. Aksenova, RUSSIAN, p. 5 Zhurnal Mikrobiologii, Epidemiologii, 1 Immunobiologii, Vol. XI., No. 5, 1963, pp. 68-72, 9222021

USDA Tr V-1903

The Use of Cricerulus Triton for the Study of Immunogenic Properties of the Foxoids of Wound Effections and Botulism, by L. M. Samorodov, RUSSIAN, per, Zhurnal Mikrobiologh, Epidemiologii i Immunobiologii, Vol XI, No 7, 1963, pp 72-77.

USDA Tr V-1904

On The Nonspecific Character of Rapidly Originating Resistance in Experimental Streptococcus and Typhord Infections, by T. A. Levina. RUSSIAN, per. Zaurnal Mikrobiologai, Epidemiologii i Immunobiologii, Vol XI., No 8, 1963, pp. 40-33, 9229019 USDA Tr V-1905.

Orbithosis Outbreak at a poultry Combine (i) Kremenets, by V. I., Singarlo, P. C., Zacako, RUSSIAN, pc. , Zagresti Mikroboologu Epidemologu Immunoboologu, V. (i) XI, No. 8, 1963, pp. 141, 442.

USDA 1 V-1906

Scientific Biological & Medical Sciences (Contd)

A Study of Botulinum Toxoida, Report 6 Type D Botulinum Toxoid, by A. A. Voroblyev, N. N. Vasillyev, et al. RUSSIAN, per, Zhur Mikrobiol Epidemiol i Immunobiol, Vol XL, No 9, 1963, pp 87-92. 9222247 USDA Tr V-1907

Detection of Plague and Tularemia Infection in Rodents, by P. Kh. Yafayev, RUSSIAN, per, Zhur Mikrobiol Epidemiol i Immunobiol, Vol XL, No 9, 1963, pp 93-96. 9222245 USDA Tr V-1908

Evaluation of Tularemia Dust Vaccine Testing, by N. I. Aleksandrov, Ye. Gefen, et al, 6 pp. RUSSIAN, per, Zhur Microbiologii, Epidemiologii i Immunobiologii, Vol XII, No 2, 1964, pp 38-43. JPRS 23921

Geographical Variability of Francisella Tularensis, by O. S. Yemel'yanova, 7 pp. RUSSIAN, per, Zhur Mikrobiol, Epidemiol 1 Immunobiol, No 3, 1964, pp 7-11.

JPRS 24225

Action of Ultrasound on Biological Properties of Intestinal Group Bacilli, Report II, Change in the Biochemical Properties and Antigenic Structure of Shigella and Salmonella When Exposed to Ultrasound, by I. F. Pers, L. G. Zhdanova, 10 pp. RUSSIAN, per, Zhur Mikrobiol, Epidemiol i Immunobiol, No 3, 1964, pp 27-33.

JPRS 24225

Antibacterial and Antiviral Action of Several Lactones and Lactams, by G. N. Pershin, G. P. Belikov, et al, 9 pp.
RUSSIAN, per, Zhar Mikrobiel, Epidemiol i Immunobiol, No 3, 1064, pp 109-114.

JPRS 24225

Sociological Concepts in Modern French and American Psychopathology, by M. Rogovin, 13 pp. RUSSIAN, per, Zhur Nevropatologii i Psikh Imeni SS, Korsakova, Vol LXIV, No 2, 1904, pp 295-302, JPRS 24402

Pathopsychological Research in the Active Inerapy of Psychoses, by V. N. Kogan, E. A. Korobkova, 7 pp.
RUSSIAN, per, Zhur Nevro i Psikh imeni S. S. Korsakova, Vol LXIV, No 3, 1964, pp. 464-467.
JPRS 24522

Conditions for Reactivating Yeast Organisms After Radiation Injury, by T. S. Remezova, V. P. Tretlyakova, 14 pp. RUSSIAN, per, Zhur Obsheh Biol, Vol XXII, No 2, 1961, pp 120-127. 9220794 AEC-UCRL- Fr-1029

Stress and Fatigue Under Isolated Conditions, by F. D. Gorbov, V. I. Myasnikov, 13 pp. RUSSIAN, per, <u>Zhur Vysshey Nervaoy Deyatel nosti</u>, Vol VIII, No. 4, 1963, pp. 585-592, 9691966 FTD-17-03-1015

Third Volga Conference of Physiologists Biochemists and Flaarmacologists, by G. N. Smetankin, 5 pp. RUSSIAN, per, Zhur Vyssi Nervnoy Deyarel, Vel XIII, No. 6, Nov. Dec. 1963, pp. 1, 108-116. JPRS 24841

Changes in Motor Conditioned Food Reflexes in Pigeons Following a Lesson of the Paleocortex, by N. L. Krushanskaya, 14 pp. RUSSIAN, p. r., Zhur Vyank Nervaoy Devatel, Vol XIII, So o, 1903, pp. 1055–1086. 1PRS 23833

400

Cross-Correlations of Bioelectric Activity of Various Areas of the Cerebral Correx of Man in the State of Relative Rest, by N. A. Gavrilova, A. S. Aslanov, et al, 9 pp.
RUSSIAN, per, Zhur Vyssh Nervnoy Devatel imeni
I. P. Pavlova, Vol XIV, No 1, 1964, pp 3-8.
JPRS 24249

The Use of Correlation Analysis in the Investigation of Electric Activity of the Cortex of Cerebral Hemispheres, by N. N. Danilova, 20 pp. RUSSIAN, per, Zhur Vyssh Nervnoy Devate! Imeni f. P. Pavlova, Vol XIV, No 1, 1964, pp 9-22.

JPRS 24249

Electroencephalographic Study of Human Brain Activity in Trace and Delayed Conditioned Reflexes, by Yu. G. Kratin, 13 pp. RUSSIAN, per, Zhur Vyssh Nervnoy Devatel Imeni 1. P. Pavlova, Vol XIV, No 1, 1964, pp 23-31. JPRS 24249

Changes in the Bioelectric Cortical Activity of the Human Brain During the Elaboration of a Motor Conditioned Reaction to Time, by I. S. Dobronravova, 10 pp. RUSSIAN, per, Zhur Yyssh Nervnoy Devatel Iment I. P. Pavlova, Yol XIV, No 1, 1964, pp 33-38.

JPRS 24249

Effect of the Prolonged Action of High Temperature on Simultaneous Complex Conditioned Reflexes in Dogs, by L. M. Sidorova, 8 pp. RUSSIAN, per, Zhur Vyssh Nervnoy Devatel Imenl 1. P. Pavlova, Vol XIV, No 1, 1964, pp 55-66.

Effect of Radioactive Sodium-24 on the Higher Nervous Activity of Dogs Following a Single Internal Administration, by B. I. Shafney, 10 pp.
RUSSIAN, per, Zher Vyssh Rerynoy Devatel imenl.
I. P. Payloya, Vol XIV, No 1, 1964, pp 61-67.
JPRS 24249

Possibilities of Using Certain Indicators in the Characterization of the Strength of the Excitation Process and Mobility of Nervous Processes in Determining the Type of Nervous System, by E. P. Kokorina, 10 pp.
RUSSIAN, per, Zhur Vyssh Nervooy Deyatel imeni
1, P. Pavlova, Vol XIV, No 1, 1904, pp 95-101.
JPRS 24249

Characteristics of Neuronic Structure and of the Topography of Reticular Formation in Carnivora, by G. P. Zhukova, T. A. Leontovich, 36 pp. RUSSIAN, per, Zhur Vyssh Nervnoy Devatel Imeni I. P. Paylova, Vol XIV, No 1, 1964, pp 122-146. JPRS 24249

Feedback and Reflex Activity of the Organism, Reply to Certain Critics of the Reflex Theory, by I. A. Bulygin, 13 pp. RUSSIAN, per, Zhur Yyssh Nervnoy Deyatel imeni I. P. Pavlova, Vol XIV, No 1, 1964, pp 161-171, TDBS 24340

Fourth All-Union Conference on Electrophysiology, by V. G. Skrebitskiy, 5 pp.
RUSSIAN, per, Zhur Vyssh Nervnoy Devatel Imeni
I. P. Pavlova, Vol XIV, No 1, 1904, pp 181-183,
JPRS 24240

Age of the Ob Whitefish (Coregonis Muksun) and Some Problems in Theory, by Y. V. Barsikov, 7 pp. KUSSIAN, per, Zool Zhur, Vol XXXIX, No 10, 1960, pp 1525-1530, 9221960 OLS 63-Hii0 PL-480

Scientific <u>Biological & Medical Sciences</u> (Contd)

Symposium on Problems Related to the Population Dynamics of Commercial Animals, by G. B. Nikol[†]akiy, 5 pp. RUSSIAN, per, Zool Zhur, Vol XXXIX, No 11, 1960, pp 1747-1750, 9221976 OTS 63-11117 PL-480

Application of Radioactive Tracers for the Study of Intrapopulation Connections as an Epizootological Factor in the Settlement of Rhombomys Opimus, by Yu. V. Rudenichik, 14 pp. RUSSIAN, per, Zool Zhur, Vol XIII, No 12, 1963, pp 1849-1855.

JPRS 23758

Current Problems in Soviet Entomology, by G. Ya. Bey-Biyenko, 11 pp. RUSSIAN, per, Zool Zhur, Vol XLIII, No 2, 1964, pp 161-171.
JPRS 24198

Twenty-Fifth Anniversary of the Belomorskaya Biological Station of Moscow State University, by L. A. Zenkevich, 5 pp. RUSSIAN, per, Zool Zhur, Vol XLIII, No 2, 1964, pp 310-313, JPRS 24198

The Institute of Hydroblology in Alexandria, by A. A. Kirpichalkov, 8 pp. RUSSIAN, per, Zool Zhur, Vol XLIII, No 2, 1964, pp 313-317.
JPRS 24198

Faual Intoxications Caused by Sarin, by G. Kotev, 8 pp. IRULGARIAN, per, <u>Voyenno Meditsinsko Delo</u>, Vol XVIII, NO 2, 1903, pp 21-26. JPRS 23891

The Formation of Oncomelania Distribution Areas in China From the Geological and Geographical Viewpoints, by Hsiao Jung-Wei, 22 pp. GHINESE, per, <u>Chung-haa I-Insuch Isa-chith</u> Vol L, No 1, 1964, pp 1-6.

The Substance Secreted by the Male Locust Har Promotes Melosis in the Ovary of the Female, by Kuo Fu, Ilsia Pang-ying, 6 pp. CHINESE, per, K¹o-hsuch T¹ung-pao, No 1, 1964, pp 66-68, JPRS 24350

Effect of Zine lons on Off Body Ovulation of BUFO BUFO Gargatizans, by Chuang Lin-chih, 7 pp.
CHINESE, per, <u>Kto-hsuch Ttung-pao</u>, No 1, 1904, pp 68-70.
JPRS 24350

Chinals Accomplishment in Surgery Dating Recent Years and Its Future Development, by Huang Chia-szu, 11 pp.
CHINESE, per, Klo-haueh Thung-pao, No 2, 1964, pp 105-109.
JPRS 24350

High Nervous Activity of Infants at the Earliest Age, by O. Janes, et al,6 pp. CZECH, bk, <u>Prehled Vedecke Cinnosti Ustavu ProPect o Marku a Dire</u>, 1961, pp. 20–23.

Post-Embryonic Development and Growth of the Domestic Cricket, Gryllus Domesticus L., by I. Hrdy. CZECH, per, <u>Acta Societatis Entomologi, ac Gechoslovaniae</u>, Vol LIII, 1950.

Influence on the Organism of Long-Term Inhalation of Oxygen During Normal Baromstric Pressure, by V. Dolezal. CZECH, per, Caskoslovanska Fysiologie, Vol XI, No 4, 1962, pp 326-355.
*FTD-TT-64-567

Two Letters From Francis Joseph Burrhus.

I. On the Origin of the Brain and Its Medical Relevance. II. On a Device for Restoring the Eye Fluids, by F. J. Burrhus, 9 pp. DANISH, bk, Epistolae Duae ad Th. Bartholinim, Copenhagen, 1669, pp 1-18.

NIH 3-0-04

Investigation on the Whipping of Cream, by A, De Yleesschauwer, et al. DUTCH, per, Mededelingen van de Landbouwhogeschool te Wageningen, Voi XXV, No 2, 1960, pp 825-837. GB/163/Anon

The Selection of the Host by Bloodsucking Arthropods. I. Stomoxys Calcitrans, by B. J. Krijgsman, 16 pp. DUTCH, per, Nederlands Industria Hiad voor Diergengesk, Vol XLII, No 1, 1930, pp 56-72. NIII 3-14-64

The Selection of the Host by Bloodsucking Arthropods. II. Lypersola Exigua, by B. J. Kriigsman, 10 pp. DU I'CH, per, Nederlands Industria Blad voor Diergengesk, Vol XLII, No 2, 1930, pp 110-120.

Study of Contamination of Livestock During Periods of Radioactive Pallout, by G. Michon, L. Jeannarie. PRENCH, rpt, Epsat d'Etude de la Contamination du Cheptel en Periode de Retombres Radioactives, 1963.

*ARC

Haloperidol, a Major Non-Phenothiazhric and Non-Reserpinic Neuroleptic, in the Treatment of Psychotes, by J. Delay, et al, 9 pp. FRENCII, per, <u>Annales Medico Psychologiques</u>, Vol XI, No 118, 1960, pp 145-152. NII 3-13-64

Statistical Assessment of the Biological Data on the Early Detection of Occupational Lead Poisoning, by M. Fauri cl., 18 pp. FRENCH, per, Archives des Maladies Professionnelles, Vol XIX, No 1, 1958, pp 5-20. 9221937 AEC-SC-T--04-43

Paper Electrophoresis Test for Ovulation, by J. Vimeux, 13 pp. FRENCH, per, <u>Bulletin Fed Gyn Obstet Fr.</u>, Vol XV, Jan-Mar 1963, pp 10-16. Navy Tr 3778 NMS 804

Analysis of the Morphological Potential and a Plan for a New Classification of the Psittact, by R. Verheyen, FRENCH, per, <u>Bulletin de Institut Royal des Science Naturelles de Belgique</u>, Vol XXXII, No 55, 1959, pp 1-49. CSIRO/No 6218

Energy Metabolism of Leucocytes, by J. Frei, 15 pp. FRENCH, per, <u>Enzymelogia Biologica et Clinica</u>, No 2, 1962/63, pp 175-187. NH 3-2-64

Development of Various Antibodies During Experimental Trypanosome Infections in Rabbits, by R. Pantrizel, et al. FRENCH, per, <u>Revae d'Immunologie et de Therapie Antimicrobienne</u>, Vol. XXVI, 1902, pp. 157-166. CSIRONO 6566

Scientific Biological & Medical Sciences (Contd)

Personality Structure and Evaluation of Psychotropic Drugs, by P. Pichot, 8 pp. FRENCH, per, Revue de Psychologie Appliquee, Vol XI, 1961, pp 353-360.
NIH 3-25-64

The Tooth-Age System in Red Deer. The Annual Ring Method, by D. Mueller-Using. GERMAN, bk, Rotwildatter-Merkblatt, pp 7-13, NZDIA

Thuenen's Theories About Site, Intensity and Price as Applied to the Site Factor in Forestry, by K. Mantel.

GERMAN, per, Allgemeine Forst und Jagdzeitung, No 6, 1959.

NZDIA

Studies on the Immunization of Cattle With Attenuated Parainfluenza-3 Cultured Virus, by K. Bogel, 6 pp. GERMAN, por, <u>Borliner and Munchener Tierarzt-Itche Wochenschrift</u>, Vol LXXV, No 22, 1962, pp 423-425, NIII 3-1-64

Flour Protein Solubility and Baking Quality. Ill. Continuous Progressive Extraction, by E. Maes. GERMAN, per, Betreide und Mehl, Vol XII, No o, 1962, pp 70-72. GB/163/Anon

Closure of Large Cranial Bone Defects With Deep Freeze Foreign Bone, by H. Rohr, T. Yoshida, 17 pp. GERMAN, per, <u>Chrurg</u>, Vol XXXI, No 2, 1960, pp 76-82, Navy Tr 3766/NMS 856

Vitamin E and Essential Fatty Acids, by F. Weber, et al. GERMAN, per, <u>Fette and Seifen</u>, Vol LXIV, 1962, pp 1149-1153. GB/163/Anon

Boron Requirement of Agricultural Cultivated Plants, by K. Peyer. GERMAN, per, <u>Mitteilungen für die Schweizerlische</u> <u>Landwirtschaft</u>, Vol X, No 6, 1962, pp 81-88. GB/25

Findings of Virological Investigations of Culves With Respiratory Syndrome With Special Consideration to the Infection With the Paratufluenza-3 Virus. 1, by K. Bogel, 8 pp. GERMAN, per, Monaushefte fuer Tierheitkunde, Vol XIII, No 5, 1961, pp 129-135.
NII 3-23-64

Findings of Virological Investigations of Calves With Respiratory Syndrome With Special Consideration to the Infection With the Parainfluenza-3 Virus. II, by K. Bogel, 17 pp. GERMAN, per, Monatshefte fuer Tierheilkunde, Vol XIII, No 6, 1961, pp 162-174. NB 3-23-64

Comparative Investigation on the Significance of Various Types of Virus in Respiratory Diseases of Cattle, by K. Bogel, et al, 13 pp. GERMAN, per, Monaishefte fuer Tierheilkunde, Vol XIV, No 9, 1962, pp 277-287. NII 3-4-64

Passive and Active Immunity in the Calf to the Parainfluenza-3-Virus, by K. Bogel, et al, 13 pp. GERMAN, per, <u>Monatshefte fuer Tierheilkunde</u>, Vol XV, No 22, 1963, pp. 191-199. NBI 3-11-64

On the Elimination of Poisonous Substances From the Blood by Means of Dialysis, by G. Ganter, 17 pp. GERMAN, per, <u>Muench Med Wochenschrift</u>, No 50, 1923, pp 1478-1480. Navy Tr 3768/NMS 858

Gravimetric Methods for Determination of the Suction Pressure and the Problem of the Negative Turgor, by K. Kreeb. GERMAN, per, <u>Planta</u>, Vol LV, 1960, pp 274-282. CSIRO/No 6610

Larrogenic Psychic Disturbances, by M. Bleuler, 14 pp. GERMAN, per, <u>Praxis</u>, Vol 1., No 12, 1961, pp 249-254. NH 3-10-64

Investigations on the Bactericidal Effects of Silver in Water, by K. Wuhrmann, F. Zobrist. GERMAN, per, Schweizerische Z fuer Hydrologie, Vol XX, No 2, 1958, pp 218-252.

Congenital Ectopia Cordia, by Shao-tsu Lee, 22 pp. GERMAN, per, <u>Thoraxchirurgie</u>, Vol V, 1957, pp 197-212. Navy Tr 3784 NMS 870

Investigations of the Behaviour of Vegetable Substances During Drying, by P. Gorling. GERMAN, per, Verein Deutscher Ingenteure Perschungsheft, Vol XXII, No 458, 1956, pp 3-35, CSIRO/No 6318

Clinical Experiences With the Dibenzocycloheptadiene Derivative Amitripty Line in a Group of Psychiatric Patients, by II. Gross, et al, 10 pp. GERMAN, per, <u>Wiener Medizinische Wochenschrift</u>, Vol CXI, 1901, pp 256-258, NII 3-17-64

Soil Assessment by Means of Biochemical Methods, by H. Koepe, GERMAN, per, <u>Z. fuer Acker und PHanzenbau</u>, Vol C, 1955,

Enzymes in the Soil and Their Importance for Soil Biology and Fertility, by E. Hofmann. GERMAN, per, Z fuer Acker und Pflanzenbau, Vol C, 1955. NZDIA

Concept of Available Nutrients, by H. Kaltoten, GERMAN, per, Z fuer Acker und Pflanzenbau, Vol Cl1, 1955, pp 165-182. GB/25

Systematic Classification and Phylogenetics of the Pentastomida, by Gunther Osche, 118 pp. GERMAN, per, Z. Morphologic and Okologic der Tiere, Vol LII, 1962, pp. 487-596. Navy Tr. 3777 NMS 863

Volkman Syndrome: Pathogenesis, Physiopathology and Therapy, by G. Pineschi. GERMAN, per, <u>Z fuer Unfallmedizin u Berufskrankheiten</u>, Vol LVI, 1963, pp 33-57.
*Navy/NMS

A Contribution to the Gensis of Ectopia Cordia Abdominalls, by Josef Ruckes, 6 pp. GERMAN, per, Zentralblatt fuer Albemeine Pathologic and Pathologische Anatomic, Vol XCIV, 1955, pp 84-86. Navy Tr 3783 NMS 800

Scientific Biology & Medical Sciences (Contd)

The Importance of Test Tube Methods in the Field of Industrial Medicine, by Karl Grosskopf, 13 pp. GERMAN, per, Zentralblatt fuer Arveitsmedizin und Arbeitsschutz, Vol XI, No 7, 1961, pp 157-163.

ACSI 1-4334
ID 2204007364

Suitability of the Tissue Culture Technique for the Isolation and Charachterization of a Cytopathogenic Mycoplasma Strain From a Buil, by K. Bogel, et al. GERMAN, per, Zentralblatt fuer Originale Bakteriologie, Vol CLXXXV, 1962, pp 423-439. NIII 3-20-64

Studies on the Resistance of Cattle and Pig Emeroviruses to Chloroform, by K. Bogel, et al, 16 pp. GERMAN, per, <u>ZentralPlatt fuer Veterinarmedizin</u>, Vol VIII, No 9, 1961, pp 908-922. NIII 3-12-64

Investigations of Production With Diploid and Tetraploid Red Clover, Trifolium Pratense L., by K. Bellmann. GERMAN, per, <u>Zuechter</u>, No 32, 1962, pp 80-89. NZDIA

Permanent Concealment of Nevus Flammeus by Moans of Tattoolng, by A. Fischer, 9 pp. ITALIAN, per, <u>Anat Chir</u>, Vol VII, 1902, pp 107-182. NAY Tr 3719 NMS 865

Findings on the biological Effects of Elevated Atmospheric Pressures, by D. Zannint, 5 pp. ITALIAN, per, <u>Medicina de Layoro</u>, Vol L.H., No 11, 1901, pp 653-657.
NH 3-8-64

Part Played by the -SH Groups in Cell Division and Morphogenesis, by J. Brachet. ITALIAN, per, <u>Minerva Medica</u>, Vol LH, No 46, 1961, pp 2091-2099. CSIRO/No 6490

Contributtion to the Study of Thorotrast Cirrhosis, by G. Pferucci, 10 pp. 1TALIAN, per, <u>Minerva Nucleare</u>, Vol VI, 1962, pp 212-216. Navy Tr 3780 NAVS 800

On the Adsorption by Tobacco of Nitrate and Ammenium-State Nitrogen, by 1. Takahashi, D. Yoshida.

JAPANESE, per, Journal of the Science of Soil and Manure, Vol XXIX, No 5, pp 200-204, No 7, pp 295-297, 1958.

CSIRO/No 5948

Studies in N-Glycosides, The Glycosylation of P-Aminobenzenethiol, by Jerzy Sykulski, 10 pp. POLISH, per, Acta Poloniae Pharmaceutica, Vol XX, No 2, 1963, pp 114-124. OTS 63-11412/2 Pp.1-480

Feeding and Food of the Sprat in the Middle Baltic, by W. Mankowski, 38 pp.
POLISH, per, Archiwum Hydrohiologii i Rybactwa, Vol XIII, 1947, pp. 37-90.
OTS 60-12490
PL-480

The Migrations and Growth of Marked Flounder From the Gulf of Gdansk and the Bornholm Basin, by W. Greglewicz, 49 pp. POLISH, per, <u>Archiwum Hydrobiologii i Rybactwa</u>, Voi AHI, 1947, pp 108-104. OTS 00-21490 PL-480

On the Elimination of Poisonous Substances From the Blood by Means of Dialysis, by G. Ganter, 17 pp. GERMAN, per, <u>Muench Med Wochenschrift</u>, No 50, 1923, pp 1478-1480. Navy Tr 3768/NMS 858

Gravimetric Methods for Determination of the Suction Pressure and the Problem of the Negative Turgor, by K. Kreeb. GERMAN, per, <u>Planta</u>, Vol LV, 1960, pp 274-282. CSIRO/No 6610

latrogenic Psychic Disturbances, by M. Bleuler, 14 pp. GERMAN, per, <u>Praxis</u>, Vol L, No 12, 1961, pp 249-254. NH 3-16-64

Investigations on the Bactericidal Effects of Silver in Water, by K. Wuhrmann, F. Zobrist.
GERMAN, per, <u>Schweizerische Z fuer Hydrologie</u>,
Vol XX, No 2, 1958, pp 218-252.
NZIJIA

Congenital Ectopia Cordia, by Shao-tsu Lee, 22 pp. GERMAN, per, <u>Thoraxchirurgic</u>, Vol V, 1957, pp 197-212. Navy Tr 3784 NMS 870

Investigations of the Behaviour of Vegetable Substances During Drying, by P. Gorling, GERMAN, per, <u>Verein Deutscher Ingenleure</u> Forschungsheft, Vol XXII, No 458, 1956, pp 3-35, CSIRO/No 6318

Clinical Experiences With the Dibenzocycloheptadiene Derivative Amirripty Line in a Group of Paychiatric Patients, by II. Gross, et al, 10 pp. GERMAN, per, <u>Wiener Medizinfache Wocheaschrift</u>, Vol CXI, 1961, pp 256-258. NIII 3-17-64

Soll Assessment by Means of Blochemical Methods, by H. Koepe, GERMAN, per, <u>Z fuer Acker and Pflanzenbau</u>, Vol C, 1955, NZDIA

Enzymes in the Soil and Their Importance for Soil Biology and Fertility, by E. Hofmann. GERMAN, per, Z fuer Acker und Pflanzenbau, Vol C, 1955. NZDIA

Concept of Available Nutrients, by II. Kaltofen. GERMAN, per, Z fuer Acker und Pftanzenbau. Vol CH, 1955, pp 165-182. GB/25

Systematic Classification and Phylogenetics of the Pentasionitia, by Gunther Osche, 118 pp. GERMAN, per, Z Morphologic and Okologic der Tiere, Vol L.H., 1962, pp. 487-596.
Navy Tr. 3777
NMS 863

Volkman Syndrome: Pathogenesis, Physiopathology and Therapy, by G. Fineschi. GERMAN, per, <u>Z fuer Unfall/aedizln u Berufskrankheiten</u>, Vol LVI, 1963, pp 33-57. *Navy/NMS

A Contribution to the Gensis of Ectopia Cordia Abdominalls, by Josef Ruckes, 6 pp. GERMAN, per, Zentralblatt fuer Allgemeine Pathologie und Pathologische Anatomie, Vol XCIV, 1955, pp 84-86. Navy Tr. 3783. NMS 869

Scientific Biology & Medical Sciences (Contd)

The Importance of Test Tube Methods in the Field of Industrial Medicine, by Karl Grosskopf, 13 pp. GERMAN, per, Zentralblatt fuer Arbeitsmedizin und Arbeitsschutz, Vol XI, No 7, 1961, pp 157-163. ACSI 1-4334 ID 2204007364

Suitability of the Tissue Culture Technique for the Isolation and Charachterization of a Cytopathogenic Mycoplasma Strain From a Bull, by K. Bogel, et al.
GERMAN, per, Zentralblatt fuer Originale Bakteriologie, Vol CLXXXV, 1962, pp 423-439.
NIII 3-20-64

Studies on the Resistance of Cattle and Pig Emeroviruses to Chloroform, by K. Bogel, et al, 16 pp. GERMAN, per, Zentralblatt fuer Veterinarmedizin, Vol VIII, No 9, 1961, pp 908-922. NIH 3-12-64

Investigations of Production With Diploid and Tetraploid Red Clover, Trifolium Pratense L., by K. Bellmann, GERMAN, per, <u>Zuechter</u>, No 32, 1962, pp 80-89. NZDIA

Permanent Concealment of Nevus Flammeus by Means of Tattoolng, by A. Fischer, 9 pp. ITALIAN, per, Anat Chic, Vol VII, 1962, pp 167-182. Navy Tr. 3779 NMS 865

Findings on the Biological Effects of Elevated Atmospheric Pressures, by D. Zaumini, 5 pp. ITALIAN, per, <u>Medicina de Layoro</u>, Vol I.II, No 11, 1961, pp 653-657. Nili 3-8-64

Part Played by the "SII Groups in Cell Division and Morphogenesis, by J. Brachet, 11 ALIAN, per, <u>Minerva Medica</u>, Vol 1 II, No 40, 1961, pp 2091-2099. CSIRO/No 6490

Contributtion to the Study of Thorotrast Cirrhosts, by G. Pierucci, 10 pp.
ITALIAN, per, Minerva Nucleare, Vol VI, 1962, pp 212-216, Navy Tr 3780
NMS 866

On the Adsorption by Tobacco of Nitrate and Ammonium-State Nitrogen, by T. Takahashi, D. Yoshida, JAPANESE, per, Journal of the Science of Soil and Manure, Vol XXIX, No 5, pp 200-204, No 7, pp 295-297, 1958.

CSIRO/No 5948

Studies in N. Clycosides, The Glycosylation of P-Aminobenzenethiol, by Jerzy Sykulski, 10 pp. POLISH, per, <u>Acta Poloniae Pharmaceutica</u>, Vol XX, No 2, 1963, pp III-124. OLS 63-II412/2 PL-480

Feeding and Food of the Sprat in the Middle Baltic, by W. Mankowski, 38 pp. POLISH, per, <u>Archiwum Hydrobiologii i Rybaetwa</u>, Vol XIII, 1947, pp 37-90.

The Migrations and Growth of Marked Flounder From the Gulf of Gdansk and the Bornholm Basin, by W. Greglewicz, 49 pp. POLISH, per, <u>Archiwam Hydrobiologii i Rybaciwa</u>, Vol XIII, 1047, pp 106-164. OTS 60-21400 PI.-480

The Food and the Feeding Habits of the Flounder in the Gulf of Gdansk, by Z. Mulicki, 30 pp. POLISH, per, Archiwum Hydrobiologil i Rybactwa, Vol XIII, 1947, pp 221-260.
OTS 60-12490
PL-480

Dental Pulp in Experimental Hyaluronidase Induced Lesion of Parodontal Tissue in White Rats, by M. Luciak, M. Baranska-Gachowska, 9 pp. POLISII, per, Czasonismo Stomatologiczne, Vol XVI, No 8, 1963.
OTS 63-11409/4
PL-480

Sex Chromatin In Giant Cells of the Adrenal Cortex of Human Fetuses, by H. Kunski, E. Pogorzelska, 6 pp. POLISH, per, Endokrynologia Polska, Vol XIII, Nos 1-6, 1962, 3-8.
OTS 62-11064/1-6
PL-480

The Influence of Stilbestrot on Thyroidal 113t Uptake and II31-L-Thyroxia. Uptake by Erythrocytes in Vitro, by A. Slebodzinski, 9 pp. POLISI, per, <u>Endokrynologia Polska</u>, Vol XIII, Nos 1 6, 1962, pp 9-18. OTS 62-11064 PL-480

The Incidence of Developmental Anomalies of the Kidney in Turner's Syndrome, by K. Rzymski, A. Graczykowska-Koczorowska, 7 pp. POLISII, per, <u>Endokrynologia Polska</u>, Vol XIII, Nos 1-6, 1962, pp 18-25. OTS 02-11064 PL-480

Studies on Erythrocyte H31-L-Thyroxine in Vitra Uptake in Children (Hamolsky Test), by N. Hornik, A. Slebodzinski, 6 pp.

POLISH, per, <u>Endokrynologia Polska</u>, Vol XIII, Nos 1-6, 1962, pp 25-32. OTS 62-11064

PL = 480

Chromatographic Studies of Hormonal Steroids in the Brown Adipose Tissue, by W. Piak, 10 pp. POLISH, per, <u>Endokrynologia Polska</u>, Vol XIII, Nos 1-0, 1962, pp 32-42. OTS 62-11064 PL-480

Bifocal Cancer of the Thyroid With Different Morphological and Clinical Features, by Cz. Wojnerowicz, 8 pp. POLISII, per, <u>Endokrynologia Polska</u>, Vol XIII, Nos 1-6, 1962, pp. 42-50. OTS 02-1064 PL-480

Results of Freating Pitui my Dwarfism With Testosterone and Flyroid Extracts, by A. Graczykowska-Koczorowska, J. Kosowicz, 6 pp. POLISH, per, <u>Endokrynologia Polska</u>, Vol XIII, Nos 1-6, 1962, pp 50-56. OTS 62-11064 Ppl.-480

Histochemical Studies of Oxidating Enzymes in the Thyroid of Rats Treated With Methylthiouracil, by J. Niwelinski, L. Zamorska, 7 pp. POLISH, per, <u>Endokrynologia Polska</u>, Vol XIII, Nos 1-6, 1962, pp 56-63. OTS 02-11064 PL 480

Scientific Biology & Medical Sciences (Contd)

Plasma 17-Hydroxycorticoid Levels of Human Individuals Subjected to Thermal Stress, by B. Gwozdz, 10 pp. POLISH, per, <u>Endokrynologia Polska</u>, Vol XIII, Nos 1-6, 1962, pp 63-73. OTS 62-11064 PL-480

Huerthle-Cell Tumor of the Thyroid, by M. Wojcowicz, 5 pp. POLISH, por, <u>Endokrynologia Polska</u>, Vol XIII, Nos 1-6, 1962, pp 73-78.
OTS 62-1064
PL-480

The Decourt-Doumic Morphogram Diagnostic Method as Modified by the Author Applicable to Children and Youth From 3 to 20 Years of Age, by N. Wolanski, 12 pp.
POLISH, per, <u>Endokrynologia Polska</u>, Vol XIII, Nos 1-6, 1962, pp 78-91, OTS 62-1064
PL-480

A Chromatin Negative Case of Bonaevie-Ulfrich-Turner-Albright's Syndrome in an HYear-Old Girl, by A. Gebala, J. Ackermann, 12 pp. POLISH, per, <u>Endokrymologia Polska</u>, Vol XIII, Nos 1-6, 1962, pp 91-103, OTS 62-1104 PL-480

The Congenital Adrenogenital Syndrome With Heterologic Precocious Puberty, by A. Wojewski, 5 pp. POLISH, per, <u>Endokrynotogia Poliska</u>, Vel XIII, Nos 1-0, 1962, pp 103-103. OTS 62-11064 PL-480

Congenital Abnormalities of the Male Gonad in Subjects With Female Psycho-Somatic Characteristics, by J. Teter, I. Szyszkowaka, 13 pp. POLISH, Per. <u>Endokrynologia Polska</u>, Vol XIII, Nos 1-6, 1902, pp 112-125. OTS 62-11004 PL-480

A Case of Osteitis Fibrosa Generalisata (Recklinchausen's Disease) Due to a Parathyroid Adenoma, by B. Tenenbaum, N. Hartel-Ulkowska, 8 pp. POLISH, per, <u>Endokrynologia Polska</u>, Vol XIII, Nos 1-a, 1962, pp 125–134. OTS 62-11064 PL-480

A Surgically Cured Case of Adrenocortical Adenoma in an 8-Year-Old Girt With Cushing's Syndrome and Symptoms of Excessive Excretions of Androgens and Estrogens, by W. Wroblewski, Cz. Gorski, 15 pp. POLISH, per, <u>Endokrynologia Polska</u>, Vol XIII, Nos 1-6, 1962, pp. 134-153.
OTS 62-1064
PL-480

Studies on Peripheral Neurosecretion I, Morphologic and Topographic Features of Neurosecretion in Mammalian Autonomic Ganglions, by M. Pawlikowski, 18 pp.
POLISH, per, Endokrynologia Pelska, Vol XIII, Nos I-6, 1962, pp 153-171.
OTS 62-1064
P1.-480

A Study of Cyst-Formative Action of Gonadorropins With Luteinizing Properties, by R. Fitko, E. Domanski, II pp.
POLISH, per, Endokrynologia Polska, Vol XIII, Nos 1-6, 1962, pp 171-182.
O15 62-1004
P1.-480

Cyst-Formative Action of Follicle Stimulating Hormones, by R. Fitko, 14 pp. POLISH, per, <u>Endokrynologia Polska</u>, Vol XIII, Nos 1-6, 1962, pp 182-196.
OTS 62-11064
PL-480

The Effects of Hormonal Stimulation on Connective Tissue, by H. Mikolajczyk, 7 pp. POLISH, per, Endokrynologia Polska, Vol XIII, Nos 1-6, 1962, pp 196-203. OTS 62-11064 PL-480

Radiological Osseous Changes in Acromegaly Observations in 44 Cases, by B. Romanowski, H. Materlik, 17 pp. POLJSI, per, <u>Endokrynologia Polska</u>, Vol XIII, Nos 1-6, 1962, pp 207-224. OTS 62-11064 PL-480

Osteomalacia, by K. Kuczewska, H. Rogala, 9 pp. POLISH, per, <u>Endokrynologia Polska</u>, Vol XIII, Nos 1-6, 1962, pp. 224-233. CTS 62-11064

PL-480 Effect of Thyroxin and

Effect of Thyroxin and Methylthlouracil on Islets of Langerhans, Adrenals and Thyroid of Castrated Mice, by F. Zych, 7 pp. POLISH, per, <u>Endokrynologia Potska</u>, Vol XIII, Nos 1-0, 1962, pp 233-240. OTS 62-1100-1 PL-480

National Symposium of Cryptorchism, by Lodz, 6 pp. PGLISH, per, <u>Endokrynologia Polska</u>, Vol XIII, Nos 1-6, 1962, pp. 240-245. OTS 64-41064 PL-480

Large Lymphocytes in Peripheral Blood as a Sign of Active Pulmonary Tuberculosis, by Z. Garnuszewski, et al, 9 pp. POLISH, per, <u>GXUZUCA</u>, Vol XXVII, No 10, 1959, pp 1019-1022. Navy Tr 3782 NMS 808

Experimental Operations of Partial Lamellar Excision of Corneal Stroma for Correction of Myopia, by T. Krwawicz, 6 pp. POLISH, per, <u>Elinika Oczna</u>, Vol XXXIII, No 1, 1963. OTS 63-11409/4 P1,-480

Studies on the Production of -Hemolysin by Staphylococci, by Zdzisława Sporzynska, Helena Mierzejewska, 13 pp. POLISH, per, Medycyna Doswiadczalna + Mikrobioiogia, Vol XV, No 2, 1963, pp. 108-120.
OTS 63-11411/2

Susceptibility of C. Diphtheriae (Pw & Strain) To Lysozyme From Egg White, by Irena Rybicka, 12 pp. POLISH, per, <u>Medycyna Doswiadczalna i Mikrobiologia</u>, Vel XV, No 2, 1963, pp. 120-132. O1S 63-11411/2 pt...*80

Sensitization of Guinea Pigs With Lyophilized Beg Vaccine, by Elzbieta Szulkin, Tpp POLISH, per, <u>Medycyna Doswiadczalna i Mikrobiologia</u>, Vol XV, Ne 2, 1963, pp 132-139. O18 63-11411/2 P1-480

Scientific Biology & Medical Sciences (Contd)

Effect of Storage-Conditions on the Adsorbent of the Combined Diphtharia-Tetanus Prophylactic, by Waclaw Wojciak, Emilia Wolaka, 9 pp. POLISH, per, Medyona Doswiadczalna i Mikrobiologia, Vol XV, No 2, 1963, pp 139-148.
OTS 63-11411/2
Pl.-480

Studies on Desoxyribonuclease From Cl. Perfringons by Amelia Zakrzewska, 8 pp. POLISH, per, <u>Medycyna Doswiadczalna i Mikrobiologia</u>, Vol XV, No 2, 1963, pp.148-156. OTS 63-11411/2 PL-480

Determination of Lower (Cl-C6) and Higher (C8-Cl8) Fatty Acids in Culture Fluids of Clostridia, by Janna Aleksandrowicz, II pp.
POLISH, per, Medycyna Doswiadczalna i Mikrobiologia, Vol XV, No 2, 1963, pp 156-167, OTS 63-11411/2 PL-480

Serological Tests in Infant Diarrhea Produced by Escherichia Coli Type Alpha And Beta, by Helena Dunin-Horkawicz, Irena Malecka, 8 pp. POLISH, per, <u>Medycyna Doswindczalna i Mikrobiologia</u>, Vol XV, No 2, 1963, pp 167-175. OTS 03-11411/2 PL 480

Isolation and Properties of Infectious Ribonucletc Acid From Coxsackte Viruses, by Zofia Kochanska-Kiepalowa, Zofia Florentyna Taytsch, 10 pp. POLISH, per, <u>Medycyna Poswiadczalna i Mikrobiologia</u>, Vol XV, No 2, 1963, pp 175-185. OTS 03-1441/2 PL-480

Patterns of Leukergte Reactions After Cranial and Brain Trauma and After Brain Surgery, by J. Wolski, 7 pp.
POLISH, per, Neurologia, Neurocines, a.c., i
Psychiatria Polska, Vol XIII, No 3, 1903.
OTS 63-11409/4
PL-480

Histologic Diagnosis of Precancerous Conditions and of Preinvasive Cancer of the Larynx, by A. Grynsziajn, J. Laciak, 15 pp. POLISH, per, Nowotwory, Vol XII, No 2, 1962, OTS 63-11409/4 P1,-480

Experimental Investigations on Homografts of the Inferior Vena Cava, by E. Pietraszkiewicz, J. Szczerban, 7 pp. POLISH, per, Polski Przeglad Chiruroiczay, Vol XXXIV, No 9, 1962. OTS 03-11409/4 PL-480

Posthemorrhagic Alterations of Right Atrial Blood Pressure, by O. Gedliczka, 10 pp. POLISH, per, Polsk! Przeglad Chirurgiczny, vol XXXIV, No 10, 1962. OTS 63-11409/4 PL-480

Experimental Studies on the Mechanism of Ascites Formation, by B. Szczygiel, 10 pp. POLISH, per, <u>Polski Tygodnik Lekarski</u>, Vol XVIII, No 1, 1903. OTS 63-11409/4 PL-480

Astrup¹s Method in the Study of Acid-Base Disturbances During Chrome Respiratory Faiture, by A. Koziorowski, L. Radwan, 7 pp. POLISH, per, <u>Polski Tygodnik Lekarski</u>, Vol XVIII, No. 5, 1963. OTS 04-11409/4 PI -480

Gangrene of the Extremities Due to Changes in the Venous System (Phlegmasta Coerulea Dolens), by F. Kanabus, M. Antoslewicz, 8 pp. POLISH, per, <u>Polski Tygodnik Lekarski</u>, Vol XVIII, No 6, 1963. OTS 63-11409/4 PL-480

Clinical Observations on the Use of D I H (Polfa Ipronal) in the Treatment of Neuroses, by M. Gamski, 10 pp.
POLJSH, per, Polski Tygodnik Lekarski, Vol XVII, No 10, 1963. OTS 63-11409/4 PL-480

Patterns of Scrum Protein in Cases of Chronic Lead Intoxication, by Z. Plamieniak, R. Smolid, POLISH, per, Polski Tygodnik Lekarski, Vol XVII, No 10, 1963. OTS 63-11409/4 PL-480

Preliminary Results of Research on the Migrations of Sea-Trout and Other Salmonid Fishes Bred in Pends, by S. Skrochowski, 32 pp. POLISH, per, <u>Polskie Archiwum Hydrobiologii</u>, Vol I, No 14, 1953, pp 89-136. OTS 60-12490 PL-480

The Effect of Spawning Conditions in Lakes of rue Eriect of Spawning Conditions in Lakes of Young Fish Populations, by F. Plinzka, 18 pp. POLISH, per, <u>Polskie Archiwum Hydrobiologii</u>, Vol 1, No 14, 1953, pp 165-188. OTS 60-12490 PL-480

Growth of the Roach, by M. Stangenberg, 22 pp. POLISH, per, <u>Polskie Archiwam Hydrobiologii</u>, Vol 1, No 14, 1953, pp 189-217. OTS 60-12490 PL~480

Variations in Feeding Habits of Fish As a Factor Stabilising Ichtyofauna Associations, by F. Pliszka, POLISH, per, <u>Polskie Archiwum Hydrobiologii</u>, Vol 1, No 14, 1953, pp 301-315. OTS 60-12490 PL-480

Polish Hydrobiological Bibliography, Part I, to pp. POLISH, per, <u>Polskie Archiwum Hydrobiologii</u>, Vol 1, No 14, 1953, pp 549-563, OTS 60-12490 PL-480

Polish Hydrobiological Bibliography, Part II. 12 pp. POLISH, per, Polskie Archiwum Hydrobiologii, Vol II, No 15, 1954, pp 251-260. OTS 60-12490

The Development of Scales in Rutilus Rutilus (L.) and Leucaspius Delineatus (Heck), by E. Balon, 10 pp. POLISH, per, Polskie Archiwum Hydrobiologii, Vol III, No 16, 1956, pp 175-187. OTS 60-12490 PL-480

A Characteristic of Rivers From the Biological and Fishery Viewpoint, by K. Starmach, 16 pp. POLISH, per, Polskie Archiwum Hydrobiologii, Vol III, No to, 1956, pp 307-332. O18 o0-12490 PL-480

Scientific Biological and Medical Sciences (Contd)

Daily Variations of Oxygen Contents in Water in Artificial River Reservoirs, by J. Paluch, 20 pp. POLISH, per, Polskie Archiwum Hydrobiologii, Vol III, No 16, 1956, pp 333-356.
OTS 60-12490 PL-480

The Feeding Habits of Rutilus Rutilus L. and Chondrostoma Nasus L. In Roznow Buffer Reservoir, by J. Paschalski, 8 pp.
POLISH, per, Polskie Archiwum Hydrobiologii,
Vol V, No 18, 1958, pp 55-64,
OTS 60-12490 PL-480

The Content of Lipids and Other Compondents in the Body of the Crucian Carp During Hibernation and Experimental Starvation, by Z. Borek, 20 pp. POLISH, per, Polskie Archiwum Hydrobiologii, Vol V, No 18, 1958, pp 65-92.
OTS 60-12490 PL-480

Clinical Studies on Lactic Acid Dehydrogenase of Leukocytes, by E. Kardaszewicz, N. Masny, POLISH, per, Polskie Archiwum Medycyny Wewnetrznej, Vol XXXII, No 1, 1962. OTS 63-11409/4 PL-480

Studies on Alimentary Chylomicronemia in Patients With Coronary Atherosclerosis, by A. Rejowa, 6 pp. POLISH, per, Polskie Archiwum Medycyny Wewnetrznej, Vol XXXII, No 6, 1962, OTS 63-11409/4

Experimental Treatment of Radiation Disease With Injection of Plasma and Transplantation of Bone Marrow of Animals Convalescent of that Dolle Marrow of Annhala Convalence it of that Disease, by J. Panasewicz, Z. Gloskowska, 6 pp. POLISH, per, Polskie Archiwum Medycyny Wewnett Znei, Vol XXXII, No 7, 1962.
OTS 63-11409/4 PL-480

Studies on the Mechanism of Anemia in Lead Poisoning, by J. Sroczynski, 9 pp. POLISH, per, Polskie Archiwum Medycyny Wewnerznej, Vol XXXII, No 7, 1962. OTS 63-11409/4 PL-480

Serum Haptoglobins in Hepatolenticular Degeneration, by K, Murawski, I. Wald, 5 pp. POLISH, per, Polskie Archiwum Medycyny Wewnetrzenel, Vol XXXII, No 8, 1962. PL-480

Testing of Anterior Pituitary Function by Means of Methopyrapon Su-4885, by A. Czyzyk, C. Gorski, POI ISH, per, Polskie Archiwum Medycyny Wewnetrznej, voi XXXIII, No 3, 1963. OTS 63-11409/4 Studies on the Effectiveness of Air Disinfection With Ultraviolet Light, by S. Zdzienicki, 23 pp. POLISH, per, <u>Przeglad Epidemfologiczny</u>, Vol XVI, No 1-3, 1962. OTS 02-11000/4 PL~480 The Problem of Epidemic Hepatitis in Pregnant Women, by L. Czarnecki, O. Granicki, 7 pp. POLISH, per, Przeglad Epidemiologiczas, Vol XVI,

No 2, 1962. OTS 62-11000/4 PL~480

Results of the Follow-Up of the Patients With Bpidsmic Hepatitis Discharged From Hospitals, by A. Gajda, 7 pp. POLISH, per, <u>Przeglad Bpidemiologiczny</u>, Vol XVI, No 2, 1962. OTS 62-11066/4 PL-480

Comperative Evaluation of the Immunizing Properties of Domestic Anti-Pertussis Vaccines in Human Beings, by A. Adonajlo, 12 pp. POLJSH, per, Przeglad Epidemiologiczny, Vol XVI, No 2, 1962.
OTS 02-10066/4 PL-480

Epidemic Hepatitis in Poland in the Decade 1951-1960, by A. Kulesza, 8 pp. POLISH, per, <u>Przeglad Epidemiologiczny</u>, Vol XVI, No 2, 1962. OTS 62-11066/4 PL-480

Analysis of an Epidemic of Epidemic Hepatitis in a Rural Area,, by W. Szmuness, 10 pp. POLISH, per, <u>Przeglad Epidemiologiczny</u>, Vol XVI, No 2, 1962. OTS 62-11066/4 PL-480

Remarks Concerning the Incidence and Epidemiology of Epidemic Hepatitis in City and Rural Schools, by W. Szmuness, 9 pp. POLISH, per, <u>Przeglad Epidemiologiczny</u>, Vol XVI, No 2, 1962.
OTS 62-11066/4

Epidemic Hepatitis and Pregnancy, by B. Kassur, J. Hornik, 6 pp. PollStl, per, <u>Przeglad Epidemiologiczny</u>, Vol XVI, No 2, 1962. OTS 62-11006/4 PL-480

PL-480

A Search of Arbor Viruses Previously Not Encountered in Poland, by Z. Wroblewska-Mularczyk, 8 pp. POLISI, per, <u>Przeglad Epidemiologiczny</u>, Vol XVI, No 3, 1962. OTS 62-11066/4 PL-480

Some Remarks on the Epidemiology of Sporadic Typhus Fever in Poland, by J. Kostrezewski, H. Wojdon, 5 pp. Polisil, per, <u>Przeglad Epidemiologiczny</u>, Vol XVI, No 4, 1902. OTS 02-11066/4 Pl.-480

Studies on the Duration of Humoral Immunity in Persons Vaccinated Against Poliomyclitis, 9 pp. POLISH, per, <u>Przegład Epidemiologiczny</u>, Vol XVI, No 4, 1902. OTS 02-11066/4 PL-480

Pollomyelitis in Foland in 1961, o pp. POLISH, per, <u>Przeglad Epidemiologiczny</u>, Vol XVI, No 4, 1962. OTS 02-11000/4 Pl.-480

The Safety of Vaccination With Attenuated Type 1 Chat and Type 3 W-Fox Pollomyelitis Virus Strains, 12 pp. POLISI1, per, <u>Przeglad Epidemiologiczny</u>, Vol XVI, No 4, 1962. OTS 62-1006, 4 P1-480

Scientific Biological and Medical Sciences (Contd)

The Role of Nonpoliomyelitic Enteroviruses in Diseases Notified as Poliomyelitis, by A. Kulesza, F. Z. Taytsch, 7 pp. POLISH, per, Przeglad Epidemiologiczny, Vol XVI, No 4, 1962.
OTS 62-11066/4
PL-480

The Quantitative Method of Evaluating Rabbit Pelts, by Sylwester Kaszowski, 55 pp. POLISH, per, <u>Roczniki Nauk Rolniczych</u>, Vol LXXI, No 3, 1957, pp. 469-533. 9221980 CTS 60-21578 PL-480

The Thyroid and Experimental Tuberculosis, by Czesiaw Maslinski, 59 pp. POLISH, per, Rozprawy Wydzialu Nauk Medycznych, Vol II, No I, 1937, pp 137-192. 9221982 OTS 00-21576 PL-480

Research Work at the Institute for State Control of Drugs and Pharmaceutical Research, by Gh. Marasolu, 8 pp. RUMANIAN, per, Farmacta, Vol XII, No 1, 1904, pp 1-6.
JPRS 24490

The Toxicity of Organophosphorus Insecticides, by L. Pilat, 5 pp.
RUMANIAN, np. Muncitorul Sanitar, 8 Feb 1964, p 3.
JPRS 24229

The Correlation of Body Weight, Thickness of the Skinfold, Percentage of Fat In the Body, Plasma Levels of Cholesterol, Phospholipids and Total Lipids, and Systolic and Diastolic Blood Pressures, by B. Simic, R. Todorovic, 14 pp. SERBO-CROATIAN, per, Acta Medica Inpostavica, Vol XVI, No 2, 1962, pp 121–137.
OTS 02-11760/2 PL-480

X-Ray PH:a Desimetry of Professionally Exposed Personnel, by M. Mihajlivic, N. Fajdiga, 8 pp. SERBO CROATIAN, per, <u>Acta Medica Ingoslavica</u>, Vol XVI, No 2, 1902, pp 141-149. OTS 02-11760/2 PL-480

The Influence of Insulin on the Metabolism of Proteins, and Glicids II. The Serum Lipid Content in Persons Suffering From Schizophrenia and its Changes in Deep Insulin Coma, by J. Bojanovic, M. Levntal-Karakusevic, 10 pp. SERBO-CROATIAN, per, Acta Medica Ingoslavica, Vol XVI, No 2, 1962, pp 151–163.

OTS 02-1170/2
PL-480

A Contribution to Carcinogenesis, by A. Kosir, 7 pp. SERBO-CROATIAN, per, <u>Acta Medica Jugoslavica</u>, Vol XVI, No 2, 1962, pp 172-179.
OTS 62-11760/2
PL-480

The Effect of Hemicholinium and Ese, inc on the Spontaneous Activity and Conductivity of Isolated Rat and Guinea Pig Auricles, by V. Varagic, Lj. Mihajlovic, 10 pp.
SERBO-CROATIAN, per, Acta Medica Jugoslavica, Vol XVI, No 2, 1962, pp 189-199.
OTS 62-11760/2
Pt.-480

The Correlation of Protein, Lipid and Glycid Metabolism II. Effect of Intravenous Injection of Glucose on Fatty Acids of Blood Plasma in Dogs During Starvation, by M. Neskovic, Z. Mladenovic-Stojimirovic, 9 pp. SERBO-CROATIAN, per, Acta Medica lugoslavica, Vol XVI, No 2, 1962, pp 201-210.

OTS 62-11760/2

The Correlation of Protein, Lipid, and Glycid Metabolism IV. Effects of Intravenously Administered Glucose on Fatty Acids of Blood Plasma in Dogs, in Nurritional Hyperlipentia Induced After Starvation, by N. Neskovic, R. Zivkovic, 7 pp. SERBO-CROATIAN, per, Acta Medica lugoslavica, Vol XVI, No 2, 1962, pp 213-220. OTS 62-11760/2 PL-480

Polarographic Analysis of the Blood Serum Proteins II, Polarographic Characterization of Different Fractions of Native Serum Proteins, by LJ, Sevaljevic, 9 pp. SERBO-CROATIAN, per, <u>Acta Medica Iugoslavica</u>, Vol XYI, No 2, 1962, pp 222-232. OTS 62-11760/2 PL-480

The Consequences of the Intravenous Inoculation of Bps 9 Tumor Cell Suspension in Rats, by S. Zivkovic, M. Visnjic-Frajud, 7pp. SERISO-CROATIAN, per, Acta Medica lugoslavica, Vol XVI, No 2, 1962, pp 234-241.
OTS 62-11760/2
PI _480

Phytocoenological Examinations of Grassland of the Type Brometo-Cynosur cum Cristati in the Vicinity of Krivi Vir, by Jakov Danon, 7 pp. SERBO-CROATIAN, per, Arhiv Bioloskih Nauka, Vol XIV, No 1, 2, 1962, pp 1-5. OTS 62-11759 PL-480

The Genesis of the Peat-Bogs in the Vicinity of the Delibiatska Pescara (Delibiato Sands), by A. Gigov, M. Bogdanovic, 31 pp. SERBO-CROATIAN, per, <u>Arhiv Bioloskih Nauka</u>, Vol XIV, No 1, 2, 1962, pp 7-28. OFS 62-11759 PL-480

The Importance of the Character of Heliogeophysical Conditions for the Ecological Typology and Metabolism of the Basic Types of Blogeocoenoses in Yugoslavia, by Milorad Jankovic, 16 pp. SERBO-CROATIAN, per, Arhiy Bioloskih Nauka, Vol XIV, No I, 2, 1962, pp. 33-36. OTS 02-11759 PL-480

A Contribution to the Knowledge of the Structure of Mixed Populations of the Amphipods Gammarus (R.) Balcanicus and Gammarus (R.) Pulex Fossarum, by Milika A. Pljakic, 8 pp.
SERBO-CROATIAN, per, Arhiv Bioloskih Nauka, Vol XIV, No 1, 2, 1962, pp. 51-57.
OTS 62-11759
PL-480

The Problem of Minnery and Me Hover Files (Syrphoidea, Diptera, by Slobodan Glumac, 8 pp. SERBO-CROATIAN, per, <u>Arhiv Holoskih Nauka</u>, Vol XIV, No 1, 2, 1902, pp. 61-66. OTS 62-11759 PL-480

Scientific Biological and Medical Sciences (Contd)

Some New Hydrobiidae of Lake Ohrid (Ohridako Jezero), Part II, by Pavle Radoman, 28 pp. SBRBO-CROATIAN, per, <u>Arhiy Bioloskih Nauka</u>, Vol XIV, No. 1, 2, 1962, pp 69-92. OTS 62-117 99 Pl.-480

Afferent Discharge From the Muscle Spindle During the Cooling of the Muscle, by J. Vuco, B. Todorovic, 7 pp.
SERBO-CROATIAN, per, <u>Arhiv Bioloskih Nauka</u>, Vol XIV, No 1, 2, 1962, pp 95-99.
OTS 62-11759
PL-480

The Seasons and Winter Sleep, by Marko Davidovic, Milenko Brankovic, 8 pp. SERBO-CROATIAN, per, Arhiv Bioloskih Nauke, Vol XIV, No 1, 2, 1962, pp 101-107. OTS 62-11759 PL-480

The Lethal Effect of Ultraviolet Light in Individual Stages of the Division Cycle of Mammalian Cells Cultivated in Vitro, by Bozidar Dordevic, 8 pp. SERBO-CROATIAN, per, Arbiv Bioloskih Nauka, Vol XIV, No 1, 2, 1962, pp. 109-115.

OTS 62-11759
P1.-480

The Effect of Cultivation in Vitro on the Success, Growth, and II31 Metabolism of Thyroid Gland Grafts, by Miroslava Pavlovic-Hournac, 12 pp. SERBO-CROATIAN, per, Arhiv Bioloskih Nauka, Vol XIV, No 1, 2, 1962, pp. 117-126.
OTS 62-11759
PL-480

Tissue Transplantation, by B, Nakic, 21 pp. SERBO-CROATIAN, per, <u>1.Hecnickl Viesnik</u>, Vol LXXXV, No 2, 1963, pp. 117-138. OTS 63-11458/2 P1.-480

Our Observations in the Diagnosts of Allmentary Lead Poisoning, by J. Neudauer, 10 pp. SERBO-CROATIAN, per, Lijecnicki Vjesnik, Vol 1.XXXV, No 2, 1963, pp 139-148. OTS 03-4488/2 PL-480

Side Effects Due to the Application of Synthetic Antimalarial Drugs in Rheumatological Practice, by Z. Henneberg, I.J. Mczulie, 8 pp. SERBO-CROATIAN, per, Lijeenicki Vjesnik, Vol LXXXV, No 2, 1963, pp [49-155, OTS 63-11458/2] PL-480

Thermoregulation and Februle States in Infants and Small Children, by S. Vukadinovic, II pp. SERBO-CROATIAN, per, <u>Lifecnicki Vjesnik</u>, Vol LXXXV, No 2, 1963, pp 169-178.
OTS 63-11458/2

The Rheumatoid Factor, by T. Durrigl, 12 pp. SERBG-CROATIN, per, <u>Lijecnicki Vjesnik</u>, Vol LXXXV, No 3, 1903, pp 245-255. OTS 63-11458/3 PL-480

Degenerative Diseases of the Spire, by D. Novosel, II pp. SERBO-CROATIAN, per, <u>Lijecnicki Vjesnik</u>, Vol LXXXV, No 3, 1963, pp 257-267. OLS 63-11458/3 PL-480

Pathogenetic Principles, Indications for And Results of Sphineterotomy, by B. Mikosevic, 10 pp. SBRBO-CROATIAN, per, Lijecnicki Vjesnik, Vol LXXXV, No 3, 1963, pp 275-283.
OTS 63-11458/3

The Third and Fourth Stages of Labor, by P. Bagovic, 13 pp. SERBO-CROATIAN, per, <u>Lijecnicki Vjesnik</u>, Vol LXXXV, No 3, 1963, pp 295-306. OTS 63-11458/3 Pl.-480

Anton Mihelic (1748-1818) and His Contribution to Neurophysiology, by L. Glesinger, II pp. SERBO-CROATIAN, per, <u>Lijocnicki Viesnik</u>, Vol LXXXV, No 3, 1963, pp 307-315, OTS 63-11458/3 PL-480

Acute Renal Insufficiency in Nursing Infants, by Gustavo Gordillo, 19 pp.
SPANISH, per, <u>Boletin Medicale des Hospitaux Infant</u>, Vol XIX, No 5, 1962, pp 535-546.
NAVY Tr 3781
NMS 867

Acute Tubular Necrosts in Newborn and Infants, by Kurt Ambrosius Diener, 8 pp.
SPANISII, per, Boleten Medicale dos Hospitaux Infant, Vol XIX, No 5, 1902, pp 547-554.
Navy Tr 3785
NMS 871

Termology: Total Absence of the Olfactory Nerves With Anosmida in a Person With Congenital Arrophy of the Testes and Penis, by A. Maestre de San Juna. SPANISH, per, El Siglo Medico, No 3, 1856, p 211. NIH 3-3-64

Health and Sick Care in the Armed Forces in 1960, by Carl Eric Groth. SWE DISH, rpt, Halso-Och Slukvard vid Forsvaret ar 1960, Stockholm, 1961, pp 1-43, Encl to R-21-62, USARMA, Sweden. *ACSI 1-4466 D 2193685

Condition of Health and Frequency of Sicknesses Among Swedish United Nation Troops in Gaza and the Congo, by Ellas Bengtsson, Lennart Hellstrom, 14 pp. SWEDISH, per , Tidskrift i Militar Halsovard, Vol LXXXVIII, No 3, 1963, pp 71-85.
ACSI 1-4406
1D 2204009064

Chemical Analyses of Plants and Their Use, by F. Steenjerg, SWEDISH, per, Fidsskrift for Planteavi, Vol XLIX, 1944, pp 158-174, CSIRC/No 0037

Effect of Cortisone on the Metabolism of Ribonucleic Acid and its Nucleotides in Liver Development, by Ts. M. Shereshevs'ka. UKRAINIAN, per, Ukrain Blokhim Zhur, Vol XXXV, No 5, 1963, pp 656-667. *NASA TT F-224

Incorporation of Radfomethfonine in the Protein Fractions of Blood Scrum Under the Effect of X-Ray Irradiation and Thiophosphamide, by I. V. Savitskiy, V. G. Zelinskiy, 8 pp. UKRAINIAN, per. Ukrain Blokhim Zhur, Vol XXXVI, So. I. 1904, pp. 14-20. JPRS 24164

Scientific Biological and Medical Science County

Changes in Certain Physico-Chemical Properties of Cerebral Proteins Under Excitation of Nervous Activity, by Ye. P. Ivanenko, V. F. Dunayeva, 10 pp. UKRAINIAN, per, <u>Ukrayin Biokhim Zhur</u>, Vol XXXVI, No 1, 1964, pp 72-79.

JPRS 24119

Synthesis and Transformation of Amine Acids and Other Organic Compounds by the Effect of Radiation and Other Types of Energy, by M. A. Kolomiychenko, 23 pp. UKRAINIAN, per, Ukrain Biokhim Zhur, Vol XXXVI, No. 1, 1964, pp 132-155.

JPRS 24164

The Effect of Petroleum Growth Stimulana (NRV) on the Development, Physiological Changes and Yield of Melons in Uzbekistan, by N. A. Ataullayev. UKRAINIAN, per, Uzbekskii Biol Zhur, No 5, 1963, pp 8-14, 922225 USDA Tr A -1435

Scientific Chemistry

Fourth All-Union Conference on the Glassy State—Themes of the Reports, by L. V. Yegorova. (SF-3199) RUSSIAN, bk, IV Vsesoyuznoye Soveshchaniye Po-Stekhoo'raznomy Sostoyaniyu Tezisy Dokladov, 1964, pp 1-94.
*JPRS

The Amino-Nitrogen Content of Gliadin, by M. S. Reznichenko, 6 pp. RUSSIAN, per, <u>Blokhimiya</u>, Vol XVI, No 6, 195i, pp. 579-583, 9221977 OTS 63-11043 PL-480

Controlled Modification of the Properties of Macromolecular Compounds, by K. Andrianov. RUSSIAN, per, Dok Ak Nauk SSSR, Vol CLI, No 5, 1903, pp 1093-1096. SEC

Synthesis of Cestum Ozonide Through Cestum Superoxide, by I. I. Bol'nov, V. V. Matveyev, 9 pp. RUSSIAN, per, Izvesitya Ak Nauk SSSR, Otdel Khim Nauk, No 6, 1963, pp Il36-1l39. 9692329 FTD-TT-64-194

Crystallohydraged of Zircontam Tetrafluoride, by Yu. Gagarinskiy, V. Mashirev. RUSSIAN, per, <u>Iz Sibirskoro Otdel Ak Nauk</u> SSSR, VNo 11, 1959, pp 50-56, CSIRO/No 6635

Determination of Ultra-Small Quantities of Uranium, Radium and Thorium Isotopes in Silicate Materials From the Same Barch. RUSSIAN, per, <u>Radiokhimiya</u>, No 2, 1963, pp 189-197, NZDIA

Electric Conductance and its Nature in the CeO 2-BeO, CeO 2-MgO, CeO 2-CaO, CeO 2-SrQ, and CeO 2-BaO, by A. D. Neuymin, S. F. Pal'guyev, 9 pp. RUSSIAN, per. Frudy Inst Elektrokhim, Ural Fillal Ak Nauk SSSR, No. 3, 1963, pp.141-147.

ACST 1-4321
ID 2204006864

Linear Polyfluorinated Analagously Bifunctional Compounds as Potential Monomers, by V. V. Shokina, 38 pp. RUSSIAN, per, <u>Uspekhi Khimii.</u> Vol XXXII, No 9, 1963, pp 1052-1086. 9692453 DDC REIG-165

Development of Quantum Chemistry, by N. D. Sokolov. RUSSIAN, per, Yest Ak Nauk SSSR, No 1, 1964, pp 108-111. SIC

Aqueous Acetone Solutions of K2CO3 for Separation of Carbon Isotopes, by I. A. Semyokhin, G. M. Panchenkov, RUSSIAN, per, Vestrik Moskov Univ, No 5, 1963, pp 29-38,

Isotope Exchange Between Carbon Dioxide Gas and Its Ethanolamine Solutions, by I. A. Semyokhin, G. M. Panchenkov, et al. RUSSIAN, per, <u>Vestnik Moskov Univ</u>, No 1, 1964, pp 35-38. *AEC

Blectrosynthesis of Ozone From Oxygen at High Pressures, by I. A. Semyokhin, N. I. Kohozev, 9 pp. RUSSIAN, por, <u>Vest Moskoy Univ, Seriya II, Khimiya</u>, No 3, 1963, pp 37-40. 9692324 FTD-TT-64-195

Ways of Improving the Use of Mineral Fertilizers, by P. Bobrovskiy, 10 pp. RUSSIAN, per, <u>Voprosy Ekon</u>, No 2, 1963, pp 64-70. JPRS 24104

Synthesis of Linear and Cyclolinear Organosilicon Compounds With Phenylenesiloxane Chains in the Molecules, by V. E. Nikitenkov, 7 pp. RUSSIAN, per, <u>Yygokomolekularnye Soyedinyeniya</u>, Vol IV, No 1, 1962, pp 105-108, 9692455 DDC RSIC-158

Reactions of a Hydroxyl With Molecules of Various Gases, by L. I. Avramenko, R. V. Lorentso. RUSSIAN, per, Zhur Fiz Khim. Vol XXIV, No 2, 1950, pp 207-213. Navy Tr 3762/APL T958

Treatment for Changing the Characteristics of Poly-Allyl Nitriles, by Chlang Ping-cheng, Chiten Pao-kung, 15 pp.
CHINESE, rpt, Chung-kuo K to-hsuch-yuan Kao-fen-tzu
Hsuch-shu Hui-i Hui-k an 1961, Petping, 1963,
pp 233-240.

JPRS 24289

Treatment for Changing the Characteristics of Poly-Allyl Nitriles, Specific Thermal Potential of Products, by Yang Wen-hstang, Chien Pao-kung, 9 pp. CHINESE, rpt, Chung-kuo Kio-hsuch-yuan, Kao-fen-tzu Hsuch-shu Hul-i Hui-kian 1961, Peiping, 1963, pp 250-254.

JPRS 24289

Electricity Characteristics of Heat-Treated Poly-Allyl Nitrile Products, by Yang Shih-kaun, Teng Yun-hatang,

CHINESE, rpt, Chung-kuo Kto-hsuch-yuan, Kao-fen-tzu Hsuch-shu Hui-i Hui-ktan 1961, Pelping, 1963, pp 269-271. JPRS 21289

The Study of Semi-Conductor Characteristics of Heat Huang Mei-ch'un, et al, 10 pp.
CHINESE, rpt, Chung-kuo K'o-hauch Yuan, Kao-fen-tzu
Hauch-shu Hui-i Hui-k'an 1961, Peiping, 1963,
pp 272-27.
JPRS 24289

Scientific Chemistry (Contd)

Research on the Radiation Effect of Alkane Polymers, by Liu K'o-ching, Hu Kuel-heien, et al, 13 pp. CHINESE, rpt, Chung-kuo K'o-heueh Yuan Kac-ren-tzu Heueh-shu Hui-f Hui-k'an 1961, Pelping, 1963, pp 297-303.

JPRS 24289

Research on the Radiation Effect of Alkane Polymers, by Hsu Shu-chen, Hu Kuei-hsien, et al, 7 pp. CHINESE, rpt, Chung-kuo K'o-hsueh Yuan Kao-fen-tzu Hsueh-shu Hui-I Hui-K'an 1961, Pelping, 1963, pp 304-307. JPRS 24289

The Radiation Effect of Polyethylene, I. X-Ray Structure Analysis of Polyethylene and Poly-Allyl Amine After Exposure to Gamma Radiation, by Ho I, Annue Arter Exposure to Gamma Radiation, by Ho I, Liu Tsu-chin, 11 pp. CHINESE, rpt, Chung-koo Kio-hsush Yran Kao-fen-tzu Hsuch-shu Hui-1 Hui-kian 1961, Pending, 1963, pp 308-313, JPRS 24289

The Radiation Effect of Polyethylene, II. Research on the Thermomechanical Characteristics of Polyethylene Under Cobalt-60 Gamma Radiation, by Wang K'o-ch'iang, Kuci Tsu-tung, et al, 14 pp.
CHINESE, rpt, Chung-kuo K'o-hsuch Yuan Kao-ten-tzu
Hsuch-shu Hul-I Hul-k'an 1961, Pelping, 1963,
pp 314-320,
JPRS 24289

The Radiation Effect of Polyethylene, III, Measurement of Solubility of Polyethylene and Poly-Allyl Amine After Exposure to Gamma Radiation, by Kuci Tsu-tung, Wang K'o-ch'iang, 11 pp.
CHINESE, rpt, Chung-kuo K'o-hsuch Yuan Kao-fen-tzu Hsuch-shu Hul-I Hul-k'an 1961, Petping, 1963, pp 321-326,
JPRS 24289

Light and Spectroscopic Properties of Inorganic Vitreous Rare Earth Oxides, by Kan Fu-hal, Chiang Chang-hung, et al., 6 pp. CHIMESE, per, Klo-hauch Tung-pao, No 1, 1964, pp. 52-54. JPRS 24372

Physical Research of Irradiative Radiation Emanation of ND3 Activated Inorganic Vitrecus States, by Kan Fu-hsi, Chlang Chung-hung, 6 pp. CHINESE, per, K'o-hsuch T'ung-pao, No 1, 1964, pp 54-56. JPRS 24372

Activity of a PbO-BiOl.5 Fused Body, by Tsou Yuan-hsi, 5 pp. CHINESE, per, Kio-hsuch Tiung-pao, No 1, 1964, pp 76, 77. JPRS 24372

Speed of Certum Oxide Reaction Upon Addition of Chlorinated Carbon, by Shul Hai-lung, 9 pp. CHINESE, per, Kto-hsuch Ttung-pao, No 1, 1964, pp 83-85. JPRS 24350

Complexometrical Titration of Calcium in the Presence of Magnesium Using Glyoxal - bis - (2-11ydroxy-Anil) as Indicator, by V. Skrivanek, P. Klein. CZECH, per, Chemicke Listy, Vol LXXXVI, pp 1110-ilis. NZDIA

Shock Initiation of Detonation in Solid Explosives, by J. Favier.

FRENCH, rpt, Les Ondes de Detonation, Colloques Internationaux du Centre National de la Recherche Scientifique, Aug, Sep 1961.

Dept of Interior

TN7 E37 No 724

Dose-Response Correlation in Radioleukemias of Mice the Probit of Tagging, by D. J. Mewissen, 29 pp. FRENCH, rpt, Radiolesions, Radiocancers et Radioprotection Chimique, Chapter VII, 1961, pp 203-257. 9221940

AEC-Tr-6301

Flame Photometry Determination of Potassium and Sodium Ions in Normal Cows! Milk. Application to the Detection of Added Alkali in Milk and the Detection of Milk From Cows With Mammitis Infection, by J. Pitre, Rigal.

FRENCH, per, Annales dos Fraudes et de l'Eport. Chim, No 635, 1961, pp 473-483.

NZDIA

On the Magnesium-Antline, by A. P. Terentyev. FRPNOH, per, <u>Belietin de la Societe Chimique de France</u>, Vol XXXV, 1924, pp 164-168.

Study of Adsorption and Desorption at Liquid Surfaces, III. Desorption of Monomolecular Layers, by L. Ter Minassian-Saraga, 42 pp. FRENCH per Journal de Chimie Physique, Vol LII, 1955, pp 181-200. NH 3-19-64

Introduction to Modern Blochemistry, by P. Karlson, GERMAN, bk, <u>Kurzes Lehrhuch der Blochemis füer Mediziner und Naturwissenschaftler</u>, 1962. Dept of Interior QP514 K 15

Influence of Manganese and Silicon on the Diffusion of Carbon in Austentic, by W. Steiner, O. Krisement, GERMAN, per, Archiv fuer Eisenhuttenwesen, Vol XXX, No 10, 1959, pp 637-640. BISI 3559

Investigations of the Equilibria at 1650°C in the System CaO-FeOn-SiO2 in the Presence of Metallic Iron, by G. Tromel, E. Gorl. GERMAN, per, Archiv fuer Elsenhuttenwesen, Vol XXXIV, No 8, 1963, pp 595-599.
BISI 3502

A Diphenol Ether and Dinitrodiphenol Ether, by R. Hirsch, GERMAN, per, <u>Berichte der Deutschen Chemischen</u> <u>Geschischaft</u>, Vol XXII, 1889, pp 335-336. *Redstone Arsenal

Swelling Pressure Determination in the Laboratory Under Conditions Approximating to Industrial Carbonization, by P. Mohrhauer. GERMAN, per, <u>Brennstoff-Chemie</u>, Vol XLI, No 5, 1960, pp 129-132. GRL/T 1362

Detection of Small Amounts of Polyglycerol Fatty Acid Esters in Edible Fats and Foodstuffs Containing Fats, by J. Wurzinger, W. Gebauer. GERMAN, per, <u>Brot und Geback</u>, No 11, 1962, pp 209-212. GB/163/Anon

Heavy Investments for Titanum Dioxide are Justified. GERMAN, per, Chem Industrie, Vol XV, 1963, pp 167-173, NZDIA

Scientific Chemistry (Contd)

Determination of the Solid Content of Hot Waste Gases by Means of the Electric Microbalance, by T. H. Gast.
GERMAN, per, Chemie-Ingenieur-Technik, Vol XXIX, 1957, pp 262-266.
CEGB 2968

The Importance of Signa-Phase Embrittlement in Chromium and Chromium-Nickel Steels Used for Chemical Plant Manufacture, by K. Richard, G. Petrich.

GERMAN, per, Chemic-Ingenieur-Technik, No 1, 1963, pp 29-36.

BISI 3582

Distribution of Pressure in Gas-Currents in Gas-Fluidising Beds, by H. Reuter, GERMAN, per, <u>Chomis-Ingoniour-Technik</u>, Vol XXXV, No 2, 1963, pp 98-103.
CSIRO/No 6572

An Attempt at a Systematic Description of Indicator Tube Reactions, by Karl Grosskopf, 25 pp.
GERMAN, per, <u>Chemiker Zeitung-Chemische Apparatur</u>, Vol LXXXVII, No 8, 1963, pp 270-275. Navy Tr 3797/NRL 973

Notes on a Few Reaction Products of Dimethyldiethoxy-Silane With Monovalent Phenois, by Brik Larsson.
GERMAN, per, Chemische Berichte, Vol LXXXVI, No 10, 1953, pp 1382-1383,
*Redstone Arsenal

The Mechanism of the Inhibitor Action of Organic Compounds in the System Iron-Actd-II, by II, Fischer, II. Yamaoka, GERMAN, per, <u>Chemische Berichte</u>, Voi XGIV, No 6, 1961, pp 1477-1496. GEGB 3174

Consistency of Margarines and Fats, by A. J. Haighton, GERMAN, per, Fette und Selfen, Vol LXV, No 6, 1963, pp 479-482. GB/I/3/Anon

Argon Determination in Popassic Minerals. Experiments With Potassium-Argon Dating of Fossils, by II. J. Lippott, W. Gentner.
GERMAN, per, Geochimica et Cosmochimica Acta, Vel XXVI, 1962, pp 1247-1252.

Binding of Protein and Different Forms of Phosphorus in Gluten, by A. Bourdet, J. Herard. GERMAN, per, <u>Getreide und Mehl</u>, Vol XII, No 6, 1962, pp 61-70. GB/f63/Anon

Concerning the Adsorption of Radon on Activated Charcoal and Silica-Get, by O. Gubeli, K. Stammbach. GERMAN, per, <u>Helvetica Chimica Acta</u>, Vol XXXIV, 1951, pp 1257-1263.
*AEC

Concerning the Mixed Adsorption of Radon on Activated Charcoal With Various Carrier Gases, by O. Gubelt, M. Stori. GERMAN, per, <u>Helyetica Chimica Acta</u>, Vol XXXVII, 1954, pp 2224-2230.

On the Radon Adsorption With Activated Charcoal in the Open System of the Free Gas Flow, by O. Gunell, M. Stori.
GERAIAN, per, Helvetica Chimica Acta, Vol XXXVIII, 1955, pp 180-184.

Scientific Chemistry (Contd)

Spectrophotometrical Determination of Acid and Alkaline Phosphatase With O-Carboxy-Phonyl-Phosphat, by Hans Brandenberger, 8 pp. GERMAN, per, Helvetica Chimica Acta, Vol XXXVIII, No. 162, 1955, pp. 1347-1351.

Navy Tr 3771/NMS 861

On the Lowering of the Freezing Point Caused by Anomalous Crystal Shape as Well as by Limitation of the Crystal Size, by Werner Kuhn. GERMAN, per, Holvitica Chimica Acta, Vol XXXIX, No 4, 1956, pp 1071-1086.

Binding of Different Alkali Salts by Casein, by U. Feitkybecht, et al. GERMAN, per, <u>Helvetica Chimica Acta</u>, Vol XLVI, No 3, 1963, pp 813-815. GB/163/Anon

The Measurement of ⁴¹A With a Closed Ionization Chamber, by G. Hasl. GERMAN, per, <u>Kerntechnik</u>, Vol V, 1963, pp 122-124.
**AEC

Effect of Fat Content on the Stability of the Protein and Fat Phase in Homogenized Cream, by N. King, GERMAN, per, Milchwissonschaft, Vol VII, 1953, pp 251-255.
G13/163/Anon

Oxidation Products of L-Ascorbic Acid. 1. Information From Paper Chromatography, by J. Herrmann, W. Andrae. GERMAN, per, <u>Nabrung</u>, Vol VII, No 3, 1963, pp 243-255. GSIRO/No 6471

Alginic Acid and Alginates Preparation, Properties and Application in Foodstuffs, Pharmaceuticuls and Cosmetics, by F. K. Marcus. GERMAN, per, Sciten-Ole, Vol LXXXIX, No 7, 1963, pp 167-169. GB/163/Anon

The Production of Sinter and Its Properties, by Schwabe, II. Reliermeyer. GERMAN, per, Stald and Elsen, Vol LXXXIV, No 3, 1904, pp 327-349.
*BISI 3717

Application of Physical Research Methods for Analysis of Volatile Smell and Taste Substances in Food, by W. Diemair, F. Schams, GERMAN, per, Z fur Analytische Chemic, Vol CLXXXIX, No 2, 1962, pp 149-173. CSIRO/No 6424

Oxygen Ion Conducting Solid Electrolytes and Their Application Possibilities, by Hans-Heinrich Mobius, 12 pp. GERMAN, per, Z fuer Chemie, Vol II, No 4, 1962, pp 100-106. ACSI 1-4330 ID 2204006964

The Adsorption of Sulphurous Acid on Platinum, Iron Oxide and Chromium Oxide, Pari II, by B. Neumann. E. Goebel. GERMAN, per, Z. Elektrochem, Vol XXXIX, No 8, 1933, pp 672-682. CEGB 2814

The Problem of Excess Oxygen in Nickel Oxide, by Hartmu Gossel, GERMAN, per, Z fuer Elektrochemic, Vol LV, 1901, pp 98-102.

Scientific Chemistry (Contd)

Effects of Carbon Dioxide Administered to the Roots of Some Cultivated Plants, by G. Giovannozzi-Sermanni. ITALIAN, per, Agrochimica, Vol VI, No 2, 1962, pp 190-198.
CSIRO/No 6408

Molecular Association of Collagen Fibers With Apatite Crystals and the Blochemical Functions of the Osseous Celts in Current Theories of Calcification, by Camille Francois, 14 pp. ITALIAN, per, Rendiconti Instituto Superiore di Santa, Vol XXV, 1962, pp 473-486.
NIH 3-22-64

Annual Report of the Japanese Association for Radiation Research on Polymers, Volume I, 1938-1959. JAPANESE, bk, Nippon Hoshasen Kobunshi Kenkyu Kyokai Nempo, Vol I, 1958-1959. 9222238-V AEC-Tr-6231

An Investigation of the Hemolytic Properties of Amphotericin-B, by K. Aokawa, et al, 14 pp. JANAMEDE, per, CHILYO, VOI XLAY, 1982, pp. 2305-2308.
NII 3-10-64

Strong Near Ultraviotet Absorption Bands Observed With Sor.e Nitro Compounds, by Saburo Nagakura. JAPANESE, per, Journal of the Chemical Society of Japan, Pure Chemistry Section, Vol LXXV, 1954, pp 822-826.

Kinetic Energy Correction for Capillary Tube Viscometers, by M. Konoshita, M. Onoyama, JAPANESE, per, <u>Journal of Industrial Chemistry</u>, Vel LXI, No 4, pp 428-431, CSIRO/No 6630

Method for the Preparation of Basic Substances for Ion Exchangers, by A. Skogseid. NORWEGIAN, Patent No 72582. MU/T 522

Method for the Preparation of Cation Exchangers, by A. Skogseid, NORWEGIAN, Patent No 72583. MU/T527

Method for the Preparation of Macro-Molecular Azo-Compounds, by A. Skogseld. NOR WEGIAN, Patent No 73344. MU/T 523

Cardenolide Glycosides II, Content of Active Substances in Leaves of Native Digitalia Purpurea L., by Janina Zurkowska, Maria Budzynska, 6 pp. POLISII, per, Acta Poloniae Pharmaceutica, Vol XX, No 2, 1963, pp 93-99, OTS 63-11412/2 PL-480

Cardenolide Glycosides III. Thin-Layer Qualitative and Quantitative Chromatography of Gdycosides From Digitalis Purpurea L., By Janina Zurkowska, Mieczysław Lukaszewski, 6 pp. POLISH, per, <u>Acta Poloniae Pharmaceutica</u>, Vol XX, No 2, 1903, pp 99-105. OTS 63-11412/2

Cardenolide Glycosides IV. Preparation of Acetylodigitoxin by Selective Acetylation of Digitoxin, by Wojenech Kroszczynski, Mieczysław Lukaszewski, 9 pp.
POLISI, per, <u>Acta Poloniae Pharmaceutica</u>,
Vol XX, No 2, 1903, pp 105-114.
O18 63-11412/2
P1,-480

Scientific Chemistry (Contd)

Study on L-Leucine Hydrochlorides, by Stanislaw Rolaki, Alina Zdunska, 6 pp. POLISH, per, <u>Acta Poloniae Pharmaceutica</u>, Vol XX, No 2, 1963, pp 124-130. OTS 63-11412/2 PL-480

Studies in Hypotensive Substances L. Dimethyl-O-Bromobenzylammonium P-Toluenesulfonate and Related Compounds Containing the O-Bromobenzyl Moiety, by Barhara Gogolimska, Ilona Gruda, 7 pp. POLISH, per, Acta Poloniae Pharmaceutica, Vol XX, No 2, 1963, pp 130-137, OTS 63-11412/2 PL-480

Synthesis of 1-(m-Aminophenyl)-2-Pyridone and Similar Pyridone Derivatives of Possible Psychotropic Activity, by Alicja Raczka, Alicja Swirska, 14 pp. POLISH, per, Acta Poloniac Pharmaceutica, Vol XX, No 2, 1963, pp 137-151. OTS 63-11412/2 P1-480

Studies on 1,2,3,4-Tetrahydro-6-Aminocarbazole Derivatives as Scrotonine Antimetabolites, by Janina Kotler-Brajiburg, 5 pp.
POLISH, per, Acta Poloniae Pharmaceutica, Vol XX, No 2, 1963, pp 151-156.
OTS 63-11412/2
PL-480

Synthests of 4-(9-Fluorenyl)-, 4-(9-Xmthyl)-and 4-(Benzhydryl)-Derivatives of N-Methyl-4-Piperidinol, by Leszek Rylski, 6 pp. POLISI, per, Acta Poloniae Pharmaceutica, Vol XX, No 2, 1963, pp 156-162. OTS 63-11412/2 P1.-480

Measurement of Spreadability of Ointment Bases, by Romualda Makedonska, 8 pp. POLISH, per, A. 21a Poloniae Pharmaceutica, Vol XX, No 2, 1963, pp 165-179. OTS 63-11412/2 PL-480

Bromocoulometric Microdetermination of Chlortetracycline Hydrochloride and Oxytetracycline Hydrochloride, by Kazimiei z Kalinowski, Alina Piotrowska, 6 pp.
POLISH, per, <u>Acta Poloniae Pharmaceutica</u>, Vol XX, No 2, 1903, pp 179-185.
OTS 63-11412/2
PL-480

Pharmacological Evaluation of Some Ointment Bases, by Halina Homrowska, Hanna Myszkorewska, 6 pp. POUISH, per, <u>Acta Poloniae Pharmaceutica</u>, Vol XX, No 2, 1963, pp 135-190. OTS 63-11412/2

Experiments on Phenol Extraction From Tar Oils by Organic Solvents, by J. Kowalski, J. Szczurck, 13 pp.
POLISH, per, <u>Koks-Smela-Gaz</u>, No. 1, 1958, pp. 11-19.
OTS 61-11350
PL-480

Experiments on Extracting Phenols From Ter Oils With Acctone, by J. Kowalski, B. Szczurck, 12 pp. POLLSki, per, <u>Koks-Smola-Gaz</u>, No 4, 1958, pp. 143-151.
OTS 01-11350
PL-480

Scientific Chemistry (Contd)

Experiments on Phenol Extraction From Alkaline Solutions of Phenolate, by J. Kowalski, J. Klose, 9 pp. POLISH, per, Koks-Smola-Gaz, No 5, 1958, pp 184-189, OTS 61-11350 PL-480

Modern Concepts of Chemical Structure of Coal, by S. Heilpern, A. Kijewaka, 17 pp.
POLISH, per, Koks-Smola-Gaz, No 2, 1960, pp 49-58.
OTS 61-11350
PL-480

Effects of Soft Water Containing Carbonic Acid on Concrete Pipes, by J. Nielsen, P. Skovgaard, SWEDISH, per, Nordisk Betong, Vol VI, No 3, 1962, pp 235-246. CSIRO/No 6592

Copper in Bulk Milk Storage Plants, by S. Johansson. SWEDISH, per, Svenska Molorittdningen, Vol LV, No 9, 1963, pp 117-120. CSIRO/No 6609

Comparative Characteristics of Spectrophotometric Methods of Determining Tantalum and Niobium. 2. Use of Organic Reagents, by A. T. Pilipenko, O. M. Yeremenko. UKRAINIAN, per, <u>Ukrain Khim Zhur</u>, Vol XXIX, No 5, 1963, pp 538–547.

Scientific Earth Sciences & Astronomy

Soviet Bloc Research in Geophysics, Astronomy, and Space Review of Research and Developments in Cloud Physics and Weather Modification, 66 pp.
RUSSIAN, rpt, 1961-1964.
JPRS 24512

Across the Alai Mountain Range, by N. Leonov, V. Ratsek. RUSSIAN, bk, Tashkem, 1962, 135 pp. ACIC

Book on Oil Bashi Reviewed, by N. N. Rostovtsev, 14 pp.
RUSSIAN, bk, Geol I Neftegazomosnost¹ ZapadnoSibirskoy Nizmennost!—Novoy Neftyanoy Bazy
SSSR, 1963, pp. 132-136.
JPRS 24485

The Gravity and Magnetic Fields and Their Significance for the Investigation of the Geological Structure of the Southern Part of the Sibertan Platform and its Framing, RUSSIAN, bk, Gravitatslonnoye I Magnituoye Polya i Ikh Znacheniye diya Izucheniya Geologicheskogo Stroyeniya Yuzhnoy Chasti Sibirskoy Platformy i Yeye Obramleniya, pp 96-104, ACIC

Offlization of Theoretical Travel Time Curves in Interpretation of Seismic Exploratory Materials on Pripyatsk Trough, by L. S. Markuze, RUSSIAN, rpt, Ispolizovantye Teoreticheskikh Godografov Pri Interpretatsii Seysmorazvedochnykh Materialov Po Propyatskomu Progliu, Moscow, 1960, pp 3-7.

ACIC

Scientific Earth Sciences & Astronomy (Contd)

On a Problem of Initiating Transverse Waves With Directed Explosions, by B. L. Kaplan, Y. V. Mayorov. RUSSIAN, rpt, K Yoprosu Yozbuzhdeniya Poperechnykh Yoln Napravlennymi Yzryvami, Moscow, 1960, pp 14-23.

Laboratory Application of the RNP Methods for Interpretation of Materials in Connection With Deep Seismic Soundings, by B. S. Vol*vovskiy, I. S. Vol*vovskiy, et al.
RUSSIAN, rpt, Laboratornoe Primenenie Metoda RNP Diya Interpretatsii Materialov Glubinnogo Seismicheskogo Zondiryvaniya, Moscow, 1960, pp 8-13.

On Velocity of Scismic Wave Propagation in the Benthenic Sediment of Rivers and Surface Layer of Swamps by I. I. Bobrovnik. RUSSIAN, rpt, Q Skorost; akh Rasprostranenty Sovamicheskikh Vola v Ponnykh Orlozheniyakh Rek I Poret khaostnom filos Boloi, Moscow, 1966, pp 24-30.

Cyclic Solar Activity and Weather Forecasting, 36 pp. RUSSIAN, bk, Solutse, Pogoda 1 Kilmat, 1963, pp. 46-64; 130-149, JPRS 24167

Experience in the Statistical Forecasting of Annual Seismicity of the Kuril-Kamehatka and California Zones for One to Five Years in Advance, by Yu. M. Alekhin, 25 pp. RUSSIAN, monograph, Statisticheskiye Prognozy v Geofizike, Leningrad, 1903, pp 60-70.

JPRS 24293

Technical Instructions for Magnetic Prospecting, hy V. Ye. Nikhiskiy, 323 pp. RUSSIAN, bk, Tekh Instruktsiya po Magnitnoy Razyedke, Moscow, 1963, pp 3-247. JPRS 24511

Turbulent Diffusion in the Surface Layer of the Earth's Atmosphere, 319 pp. RUSSIAN, bk, Vopcosy Turbulentnoy Diffuzit v Prizemnom Sloye Atmosfery, No 15, 1903, Lentograd University, pp 1-240, JPRS 24490

Underground Explosion Waves, by G. M. Lyakhov, G. I. Polrovskiy, 149 pp. RUSSIAN, bk, Vzryvnyye Volny v Gruntakh, 1962, pp 1-103, 0692296 FTD-TT-63-724

Principal Features of the Structure of the Bottom of the Northeastern Part of the Indian Ocean, by P. L. Bezrukov, V. F. Kanayev, 6 pp. RUSSIAN, per, Dok Ak Nauk SSSR, Vol CLIII, No 4, 1903, pp 920-929.

JPRS 2418e

Geological Effectiveness of Gravimetric Prospecting in Pechora Coal Basin and Adjoining Areas, by B. D. Poletayev, Yu. A. Bosykh. RUSSIAN, per, Geofiz Razvedka, No 10, 1962, pp 34-44. ACIC

Telluric Bays and Disturbances, 20 pp. RUSSIAN, per, Geol i Geof, No. 12, 1963. JPRS 24049

Discussion of Article on the Climatology of Heat Balance, by M. I. Budyko, 15 pp. RUSSIAN, per, <u>12 Ak Nauk SSSR, Seriya Geografiches-</u> kaya, No. 1, 1964, pp. 101-112, JPRS 23924

Scientific <u>Earth Sciences & Astronomy</u> (Contd)

Gorpuscular Solar Radiation on the Descanding Curve of the Solar Activity, by A. S. Dvoryashin, L. S. Levitskiy, RUSSIAN, per. IZ Krymakoy Astrofiz Obsery, Vol XXVII, 1962, pp 167-177.

*NASA TT F-225

On the Structure of Magnetic Fields in the Active Region of the Sun, by V. Ye. Stepanov, S. I. Gopasyuk. RUSSIAN, per, <u>12 Krymskoy Astrofiz Observ,</u> Vol XXVIII, 1962, pp 194-223, 9217321
NASA TT F-144

Proton Flares During the Period 1957-1961 and the Configuration of Interplanetary Magnetic Field I, by A. S. Dvoryashin, RUSSIAN, pev. Iz Krymskoy Astrofiz Obsery, Vol XXVIII, 1962, pp 293-304.
*NASA TT F-226

Nuclear Processes in Chromospheric Flares, by B. M. Vladimirskiy, A. B. Severnyy, RUSSIAN, por, <u>Iz Krymskoy Astrofiz Obsery,</u> Vol XXIX, 1963, pp 80-85. *NASA TI F-214

Archeological Exploration in Mongolia in 1901-1962, by A. P. Okladnikov, V. Ye. Larichev, 16 pp.
RUSSIAN, per, Izvest Sibirskogo Otdel Ak Nauk SSR, No 1, 1963, pp 78-89.
JPRS 24291

Report on the Activities of the Siberian Division of the Geololical Committee for 1920. III.
Topperaphic Operations, Report About Trigonometric Operations in Anzhersk-Sudzhensk Coal Basin Executed in 1920, by I. D. Androsov.
RUSSIAN, per, Jz. Sibirskogo Otdel Geologichenskogo Komiteta, Vol II, No 6, 1922, pp 61-69.
ACIC

Route Geological Investigations in the Basin of the Right Tributaries of the Yenlsey River, North From the Garevka River, Carried Out in the Northern Yenlsey Taiga in 1928, by I. G. Nikolayev. RUSSIAN, per, Iz Sibirakogo Otedleniya Geologicheskogo Komilieta, Vol X, No 1, 1929. ACIC

Characteristics of Oxidation Reduction Conditions in Soits Under Various Types of Plantations, by 1. S. Kaurichev, E. M. Nozdrinova, RUSSIAN, per, Iz Timiryazevskov Sel'skokhoz Ak, No 5, 1958, pp 161-176.

Impossibility of Determining Geoid's Figure When Information Is Confined to Graylmetric and Geodetic Data, by V. A. Kuziyanov, M. Yu. Safitov. RUSSIAN, per, 12 Vyssh Ucheh Zaved, Geodez Lacrofotos, No 2, 1960, pp 89-93.

Investigation of Heterogenous Magnetization of Rock, by G. A. Solov'yev, S. Ordzhonikidze, 6 pp. RUSSIAN, per, <u>12 Vysshikh Ucheb Zaved, Geolo i Razvedka</u>, No 3, 1964, pp 120-123.

JPRS 24312

Adiabatic Invariants of the Atmospheric Processes, by A. M. Olukhow, 9 pp. RUSSIAN, per, <u>Met i Gid</u>, No 2, 1964, pp 3-9. JPRS 24202

Statistical Methods of Weather Forecasting, by N. A. Bagrov, 14 pp. RUSSIAN, per, Met i Gid, No 2, 1964, pp 10-19, JPRS 24202

A Method of Calculating the Mean Value of H500 on the Tendency of the National Synoptic Period, by S. T. Pagava, 10 pp. RUSSIAN, per, Met.i Gid. No 2, 1964, pp 20-26. JPRS 24202

An Investigation of the Anomalous Short-Period Oscillations of Cyclonic and Anticyclonic Activity, by N. A. Belinskiy, M. G. Glagoleva, 7 pp. RUSSIAN, per, Met 1 Gid, No 2, 1964, pp 27-31, JPRS 24202

Objective Forecasting of Mean Values of H500 of a Synoptic Period, by A. L. Kats, Y. f. Knyazeva, et al, 8 pp.
RUSSIAN, per, Met i Gid, No 2, 1964, pp 32-36.
JPRS 24202

Analysis of Peculiarities of Zonal Circulation, by N. I. Zvorev, 7 pp. RUSSIAN, per, Met 1 Gid, No 2, 1964, pp 36-40. JPRS 24202

Some Questions on the Synoptic Method of Long-Range Weather Forecasting, by Z. L. Turketti, 13 pp. RUSSIAN, per, Mct i Cid, No 2, 1964, pp. 42-48, JPRS 24202

Literature in Meteorology and Hydrology for 1963, 12 pp. RUSSIAN, per, Met 1 Gid, No 2, 1964, pp 58-61, JPRS 24202

On the Development of a Mineralogy of Meteorites, by D. P. Grigor' yev, V. D. Kolomenskiy, et al. RUSSIAN, per, Meteoritika, No 20, 1901, pp 172-177.

Age and Evolution of Meteoritic and Terrestrial Matter in the Light of Recent Investigations, by V. L. Baranov, K. G. Knorre, RUSSIAN, per, Meteoritika, No 21, 1961, pp 15-61.

Chemical Composition of 18 Stony Meteorities From the Collection of the USSR Academy of Sciences, by M. I. D'yakonova, V. Ya. Kharitonova, RUSSIAN, per, Meteoritika, No 21, 1901, pp 52-59.

Chemical Composition of the Chondrules of the Nikol skoye and Saratov Meteorites, by M. I. D'yakonova, V. Ya. Kharitonova, RUSSIAN, per, Meteoritika, No 22, 1962, pp 71-73. * *AID

Ratio of Different Forms of Iran In Chomites, by A. A. Yavnel¹, RUSSIAN, per, <u>Meteoritika</u>, No 22, 1962, pp 74–82.

Structure and Conditions of Iran Meteorite Crystallization, by A. A. Yavnel¹, RUSSIAN, per, <u>Meteoritika</u>, No 22, 1962, pp 83-93. *AIL

Method of Investigating Meteorites and Tektites by Means of Infrared Spectrometry, by A. A. Kadushin, G. G. Vorob'yev, RUSSIAN, per, <u>Meteoritika</u>, No 22, 1962, pp 104-109.

An Abyssal Automatic Eurbulence Meter, an Instrument for the Registration of Turbulent Fluctuations of Velocity and Jemperature in the Ocean, by A. A. Kolesnikov, N. A. Panteleyev, 13 pp. RUSSIAN, per, <u>Okeanologiva</u>, No. 8, 1903, pp.911–921.
Navy 11, 3774
ONI 985

Strontium-90 in the Surface Waters of the Atlantic Ocean in the First Half of 1961, by E. G. Azhazha, P. M. Chulkov, 10 pp. RUSSIAN, per, <u>Ckeanologiva</u>, Vol IV, No 1, 1964, pp 68-73. JPRS 24281

The Nature of Sound-Scattering Layers, by I. B. Andreyeva, Yu. G. Chindonova, 23 pp. RUSSIAN, per, Okeanologiya, Vol IV, No 1, 1964, pp 112-123.
JPRS 24274

Marine Geomorphological Research Using the Ladoga Procision Depth Recorder, by G. B. Udhntsev, G. V. Agapova, 31 pp. RUSSIAN, per, Okeanologiya, Vol IV, No 1, 1964, pp 156-166. JPRS 24317

Detection of Upwelling and Sinking of Water in the Central Part of the Pacific Ocean, by Yu. A. Gorbenko, 17 pp. RUSSIAN, per, Okeanologiya, Vol IV, No 1, 1964, pp 167-174, JPRS 24275

Determination of Available Aluminium In Solls, by N. K. Krupskiy, et al. RUSSIAN, per, <u>Pochvovedeniye</u>, No 10, 1901, pp 93-96. GB/25

High Latitudinal Oceanographic Expedition of the Diesel-Electric Vessel Ob¹, by L. L. Balakshin, RUSSIAN, per, <u>Problemy Arktiki</u>, No 3, 1958, pp 124-127.
*Navy/HO 223

Generation of Transverse Waves by Directed Explosions, by B. L. Kaplan, V. V. Mayrov, 14 pp. RUSSIAN, per, Razved i Prom Geoffz, No 36, 1960, pp 14-23. 9220791
AEG-UGRL-17-992(L)

Use of an Electromagnetic Current Meter in Arctic Waters, by V. G. Ledenev, 7 pp. RUSSIAN, per, Trudy Arkticheskogo 1 Amarcticheskogo Nauch-Issled Institut, Vol CCX, No 1, 1961, pp 106-110, JPRS 24294

The Content of Mercury in Gertain Natural Waters, by N. Kh. Aydin'yan, 10 pp.
RUSSIAN, per, Trudy Inst Geol Rudnykh Mestorozhdenty,
Petrograf, Mineralog, 1 Geokhim, Voprosy Geokhim,
No 70 (III), 1962, pp 9-14.
JPRS 23931

The Problem of Mercury Migration in the Supergene Zone, by A. A. Saukov, N. Kh. Aydin⁴yan, et al., 14 pp. RUSSIAN, per, <u>Trudy Inst Geol Rudnykh Mestorozhdenly</u>, Perrograf, Mineralog, i Geokhim—Voprosy Geokhim, No 70 (III), 1962, pp 20-30.

JPRS 23931

Determination of Small Quantities of Mercury in Natural Objects, by R. Kh. Aydin'yan, 26 pp.
RUSSIAN, per, Trudy Inst Geol Rudnykh Mestorozhdeniy, Petrograf, Mineralog, 1 Geokhim, No 46, pp 98-108, JPRS 23931

Some Data on the Transition of Mercury in a Solution With the Interaction of Ginnabar, Metallic Mercury and Mercuric Suffide With Distilled and Natural Water, by N. Kh. Aydin'yan, 7 pp. RUSSIAN, per, Trudy Inst Geol Rudnykh Mestorozhdeniy, Fetrograf, Mineralog, i Geokhim, No 46, pp 109-111, JPRS 23931

Scientific <u>Barth Sciences & Astronomy</u> (Contd)

Problem of the Distribution of Mercury in Modern Deposits, by N. Kh. Aydin'yan, N. A. Ozerova, et al, 10 pp. RUSSIAN, per, Trudy Inst Geol Rudnykh Mestorozhdeniy, Petrograf, Mineralog, I Geokhim, 1963, pp 5-11. JPRS 23981

Problem of the Hypergenic Migration of Mercury, by N. Kh. Aydin'yan, G. A. Belavskaya, 5 pp. RUSSIAN, per, Trudy that Geol Rudnykh Mestorozhdeniy, Petrograf, Mineralog, 1 Geokhim, 1963, pp 12-13, JPRS 23931

On the Distribution of Mercury in the Rocks and Minerals of the Khibinskiy Massif, by N. Kh. Aydin'yan, L. L. Shilin, et al, 13 pp. RUSSIAN, per, Trudy Inst Geol Rudnykh Mestorozhdenty, Petrograf, Mineralog, i Gookhim, 1963, pp 16-25, JPRS 23931

Types of Ore Indicators Used in Prospecting for Hidden Mercury Antimony Deposits, by V. P. Fedorchuk, 17 pp. RUSSIAN, per, Trudy Inst Geol Rudnykh Mestorozhdeniy, Petrograf, Mineralog, i Geokhim, 1963, pp 26-38.

Isotopic Composition of Sulfur in Rock and Minerals of the Nikitiva Mercury Deposits in the Donbass, by V. I. Vinogradov, 16 pp.

JPRS 23931

RUSSIAN, per, Trudy Inst Geol Rudnykh Mestorozhdenty, Petrograf, Mineratog, I Geokhim, 1963, pp 154-164, JPRS 23931

Liberation of Water by a Magmatic Melt, by Yu. P. Masurenkov. RUSSIAN, per, <u>Frudy Laboratorii Gidrogeologicheski</u>kh <u>Problem</u>, Vol XLVIII, 1962, pp 33-41.

An Attempt to Calculate the Heat Budget of the Sea of Okhotsk, by A. M. Bataling, N. G. Vasyukova, 20 pp. RUSSIAN, per, Trudy Okeanograficheskol Komisti, Vol VII, 1960, pp 37-51. Navy Tr 3754/HO 145

Relationship Between the Radai Signal Reflected Frem a Cloud and the Cloud Parameters, by Borovikov, Mazin, et al, 23 pp. RUSSIAN, per, Trudy Tsentral Aerolog Chisery, No. 36, 1961, pp. 14-30. ACSI 1-4158 ID 2204004064

Mass Spectrometry Methods for Studying the Molecular (Neutral) Composition of the Upper Atmosphere, by G. M. Marrynkevich. RUSSIAN, per, Trudy Tsentral nava Aerolog Observator. No 40, 1903, pp 03-75.
*Navy/APL J 359

Temperature Measurement of the Free Atmosphere Taking Into Account the Recombination of Atoms, by A. F. Chizhov. RUSSIAN, per, Irudy Tsentral Aerolog Observ, No. 40, 1903, pp. 76-84.
*NASA TT F-215

Concerning Microstructure of the Lusar Surface, by N. P. Barabashov, V. I. Garazha. RUSSIAN, per, <u>Isikulyar Astron Observ</u>, No 24, 1961, 11 pp. ACIC

The Restramization of Hydromyte consequency ye, K. Feddrov, 9 pp. RUSSIAN, per, <u>Vest Ak Nauk SSSR</u>, No. 1, 1904, pp. 10-21. JPRS 24-28

Scientific Earth Sciences & Astronomy (Contd)

Rapid Pulsations of the Earth's Electromagnetic Field and Processes in the Upper Atmosphere, by Y. A. Troitskays, 7 pp. RUSSIAN, per, Yest Ak Nauk SSSR, No 1, 1964, pp 22-25.

JPRS 24085

Work of the Department of Geophysical Prospecting Methods, by A. S. Semenov, 14 pp. RUSSIAN, per, Vest Leningrad Univ, No 24, 1963, pp 147-155.
JPRS 24346

Optimal Complanar Flight Between Orbits, by S. N. Kirpichnikov. RUSSIAN, per, Vest Leningrad Univ, No 1, 1964, pp 130-14i. *NASA TT F-221

The Subject Matter of Studies of Soil and Geography, by K. P. Gorshenin, 7 pp. RUSSIAN, per, Yest Sel'skokhoz Nauk, No3, 1964, pp 87-91.

JPRS 24488

Organization of the Gravimetrical Survey in the Chinese People's Republic, Measuring Grid for Computation on Astronomic and Gravimetric Leveling, by Fan Tszyun', CHINESE, per, Acta Geodetica et Cartographica Stnica, Vol III, No 3, 1949-1959, pp 183; 209, 210, 2006.

Investigation of the Elastic Properties of Rocks Under High Isostatic Pressures, by Wei-Chin Fang, 41 pp. CHINESE, per, <u>Wu Li Hsuch Pao</u>, Vol XI, No 1, 1902, pp 28-46, 9092596 F ID-TT-03-725

Determination of Interpolation Accuracy in Gravimetric Maps, by Vincenc Vyskocil. CZECH, per, <u>Studia Geophysica et Geodetica</u>, No 7, 1963, pp. 228-232. ACIC

The Static Quartz GravImeter and the Gravity Measurements, by G. Norgaard. DUTCH, rpt. Fin Statischer Quarzoch Schwerentesser im Schweremessungen, Denmark, 1939, pp 1-23. A CIC

Calibration of Gravimeters on the European Pendulum Bases, by Jean Martin, FRENCH, rpt, Etalomage des Gravimetres sur les Bases Pendulaires Europeannes, 2nd Edition, Paris, 1955.

Scientific Results of the Missions of the Society of Geological and Mining Studies of the Congo Basin and Related Works, Geodesy and Geophysics, Gravimetry, by L. Jones, P. L. Manhieu, et al. FRENCH, rpt, Records of the Musee Royal du Congo Belge, Vol XXXVI, 46 pp.

Diameter and Form of the Lunar Disk, by Stanislas Chevaller. FIRENCII, per, <u>Bulletin Astronomique</u>, Vol XXXIV, 1917, pp 5-28. ACIG

Diameter and Form of the Lunar Disk, Second Paper, by Stanishas Chevater. FRENCH, per, <u>Bulletin Astronomique</u>, Vol XXXIV, 1917, pp 161-168. ACIC

Scientific <u>Earth Sciences & Astronomy</u> (Contd)

. 5

Interpretation of Gravimetric Anomalies. Some Recent Developments, by V. Baranov. FRENCH, per, <u>Bulletin Geodesique</u>, No 45, 1957, pp 20-24. ACIC

Mean Free-Air Bouguer Anomalies, by S. Coron, D. Kotlarz. FRENCH, per, <u>Builetin Geodesique</u>, No 69, 1963, pp 239-247.

International Glaciological Greenland Expedition, Results of Summer Campatgn, by W. Hofmann, GERMAN, rpt, Report 1, 1959, ACIC

International Glaciological Greenland Expedition. Results of the Summer Campaign, by W. Hofmann. GERMAN, rpt, Report 2, 1959. ACIC

Reports on the Session of the German Geodetic Commission or 27 September 1956 in Essen, GERMAN, per, <u>Doutsche Geodactische Kommission</u>, Sep 1956, pp 34-36.

Map Showing Mean Free Air Anomalies for Neathnes 61 x 101 of Western Germany, by Karl Gerke, Heinz Watermann.
GERMAN, per, <u>Deutsche Geodactische Kommission Serte B.</u> Angewandte Geodacsie, No 46, 1959, pp 7-14.
ACIC

Contribution to the Adjustment of the Space Fraverses in the Aerial Triangulation, by Hans Bertram, GERMAN, per, <u>Deutsche Geodaetische Kommission</u>, Serte A: Higher Geodesy, No 43, 1903, pp 1-42. ACIC

Determination of the Browne-Effect by Means of Graduated Gyroscopes, by A. Graf. GIRMAN, per, <u>Deutsche Geodactische Kommission</u>, <u>Serie B. Angewandle Geodacsie</u>, No 92, 1963, 16 pp. ACIC

Determination of Clay Minerals in Soils by Means of Phase Contrast Microscopy and Dark Field Colour Immersion Method, by B. Meyer, E. Kalk, GERMAN, per, <u>Landwirtschaftliche Forschung</u>, Vol XII, 1959, pp 3-12. CSIRO/No 0707

Experiences and Measurement Results Obtained Hitherto With the Sea Gravimeter, by A. Graf. CERMAN, per, <u>2 feur Geophysik</u>, Vol XXIII, No 1, 1957, pp 4-25.

Model Experiments on Undistrubed Soft Columns Dealing With Soft Generic Mechanisms Using Radioactive Soil Constituents. I. Assay Fechnique and Experimental Setup, by it. Scharpenseel, W. Kerpen. GERMAN, per, Z. fuer_Pflanzenernahrung, Dangong, Bodenkunde, Vol. Cl., No.1, 1963, pp.1-10. CSRO/No.0709

Evaluation and Outline of an Electro-Optical Distance Meter With Visual Observation. Part II, by II, Ellenberger: GERMAN, per, Z feur Vermessungswessen, No 8, 1950, pp 304-312. ACIC

Scientific Earth Sciences & Astronomy (Contd)

والمنظمينية والموالي والمنافي والمنافق والمنافق

The Determination of the Earth Sphere Withthe Aid of Artificial Satellites, Chapter V. Geometry of the Leveling Spheroid, by Bonn G. Hergenhahn. GERMAN, per, Z feur Yermessunswesen, No 10, 1960, pp 363-371.

T A

The New Topographic Map 1:50,000 in Bavaria, by Ludwig Katzenberger, CERMAN, per, Z feur Vermessungswesen, No 10, 1963, pp 425-429, ACIC

Gravimetric Survey of the Lower Aniene Valley, by G. Amadei, A. Maino, et al. ITALIAN, per, Bollettino del Servizio Geologico ditalia, Vol LXXIV, No 1, 1952, pp 281-293.

On the Surface Gravity of a Planet Assumed Ellipsoidal With Three Axes, by Corradino Minco. ITALIAN, per, Bollettino della Unione Matematica Italiana, Vol VII, No 2, 1928, pp 80-81.

Rigorous Development of the Newtonian Earth's Potential, by Massimo Minco.
ITALIAN, per, Bollettino dell'Unione Matematica Italiana, Series 3, Vol IV, No 4, 1949, pp 391-394.

General Theory of the Gravity Field of the Ellipsoid of Rotation, by Carlo Somigliana. IFALIAN, per, Memorie della Società Astronomica halfana, New Series, Vol IV, No 4, 1929, pp 425-427.

On the Determination of the Geoidal Constants by Means of Gravity Measuremants Alone, by Carlo Somigliana, ITALLAN, per, <u>Rendiconti dell'Accademia Nazionale</u> del Lincel, Series OA, Vol V, 1927, pp 319–323.

On the External Field of Gravity of the Ellipsoidal Geoid, by Carlo Somigliana. ITALIAN, per, <u>Rendfcontt dell'Accademia Nazionale</u> <u>del Lincel</u>, <u>Series 6</u>, Vol II, 1930, pp 237-243. ACIC

Comparison of the Various Types of Geometric Precision Leveling Obtained With the Values of Gravity Observed in Each Station, by Giovanni Boaga, 11 ALIAN, per, Rendiconte dell'Accademia Nazionale del Lincei, Series 8, Vol XXV, No 5, 1958, pp 254-259, ACIG

On the Expression of Gravity on the Surface of a Geoid Supposed Ellipsoidal, by Paolo Pizzettí. ITALIAN, per, <u>Rendiconti della Reate Accademia dei Llucci, Sertes 5</u>, Vol III, No 4, 1894, pp 166-172. ACIC

Some Considerations on Professor Pizzetti[†]s Paper: On the Expression of Gravity on the Surface of a Geold Supposed Ellipsoidal, by G. Morera, ITALIAN, per, <u>Rendiconti della Reale Accademia</u> <u>del Lincei, Series 5</u>, Vol III, No 7, 1894, pp 371-3... ACIC

On the Relationship Between Geoidal Constants and Gravity Values, by Carlo Somigliana. FTALLAN, per, <u>Rendiconti della Reale Accademia dei Linces</u>, Series 6A, Vol V, 1927, pp 11-16.

Scientific Earth Sciences & Astronomy (Contd)

Theoretical Analysis of the Light Factor and Photosynthesis in Plant Communities. The Relationship Between Foliage Structure and Direct, Diffused and Total Solar Radiation, by S. Kuroiwa, M. Monsi, JAPANESE, per, Journal of Agricultural Meteorology, Vol XVIII, No 4, 1963, pp 142-151.

i. Triangulations, Il. Leveling. Continental Portugal and the Adjacent Islands. PORTUGUESE, rpt, I, Triangulations, II, Nivellement. Portugal Continental of lies Adjacentes, pp 7-14, 29-35. ACIC

Rumanian Geological Research, by I. Petrisor, 19 pp. RUMANIAN, per, <u>Lupta de Clasa</u>, No 2, 1964, pp 27-40. JPRS 23943

Gravity Measurements. General Plan for the Island of Cuba, SPANISH, rpt. ACIC

Scientific Electronics

A Selempid With a Uniform Magnetic Field, by S. P. Kapitsa. RUSSIAN, bk, Elektronika Bol'shikhmoshchnostei, Moscow, 1903, pp 109-118.

A Wide-Range Panoramic Wavemeter, by S. P. Kapitsa, N. I. Kondrat'ev. RUSSIAN, bx, Elektronika Bol'shikhmoshchnoatei, Moscow, 1903, pp 119-121.

Ultra-High-Frequency Measurements Recorded on Millimeter-Graph Paper, by S. P. Kapitsa, N. I. Kondrat'ev, et al. RUSSIAN, bk, Elektronika Bol†shikhmoshchnostei, Moscow, 1903, pp 122-132. *AEC

Measurements of High-Frequency Fields in Resonators, by S. P. Kapitsa, Yu. M. Tsipenyuk, RUSSIAN, bk, Elektronika Bol[†]shikhmoshchmostel, Moscow, 1963, pp 133-147.

Constructive Optimal Coding Methods for Noisy Channels, by B. S. Fleyshman, 311 pp. RUSSIAN, bk, <u>Konstruktivnyve Metody Optimal nogo Kodfrovantya Diya Kanalov s Shuman</u>, Moscow, 1963, pp 1-224.

JPRS 24089

Shortwave Antennas, by G. Z. Ayzenberg, 135 pp. RUSSIAN, bk, <u>Korotkovolnovyye Antenny</u>, 1962, pp. 309-356; 478-505; 592-616; 622-630. ACSI 1-3833 ID 2253802

Principles of Radiochemistry, by I. E. Startk, 513 pp. RUSSIAN, bk, <u>Osnovyy Radiokhimii</u>, Moscow-Leningrad, 1989, 459 pp. <u>9220</u>342 AEC-17-6314

Scientific Electronics (Contd)

Radio Equipment Used in Coastal Pilotage.
by Ye. Ya. Shchegolev.
RUSSIAN, bk, Radiotekhnicheskiye Sredstva Morskogo
Sudovozhdeniya, 1956, pp 71-80; 115-143; Encl No 1
16 NA Moscow, IR-98-57.
ACSI 1-4528-A-C
ID IR 5020926

Diffusion of Elements From Groups III and V in Silicon, by R. Saintesprit, 13 pp.
RUSSIAN, rpt, Solid State Electronics, Vol I, No 2, 1960, pp 123-130. 9221931
AEG-Tr-0322

Digital Computer for Training Purposes ENC, by V. I. Matov, O. A. Nilolayev, et al, 171 pp. RUSSIAN, bk, Ucheb Tsifrov Vychisl Mashin, Moscow-Leningrad, 1963, pp. 1-128.

Some Features in the Electroslag Melting of Large Diameter Consumable Electrodes, by Yu. V. Latash, Ye. O. Paton, 10 pp. RUSSIAN, per, <u>Aviomat Syarka</u>, No 6, 1958, pp 76-83. JPRS 24369

Problem of Electronarcosis and Electro-Sieep, by Z. Servit, Ya. Burets, 21 pp. RUSSIAN, per, <u>Chekhoslovatskaya Fiziologiya</u>, Vol II, No 4, 1953, pp 337-346. 9692312 FTD-TT-63-931

Device for Continuous Recording of the Signal to Noise Ratio, by G. I. Levitan, A. L. Peysikhman, 16 pp. RUSSIAN, per, <u>Elektrosvyaz</u>, No 3, 1964, pp 5-16, JPRS 24527

Radio Electronics and Adjacent Sciences, by V. Govyadnov, 11 pp. RUSSIAN, per, <u>Kommunist</u>, No 2, 2 Jan 1964, pp 87–95. JPRS 24125

Precision Distance Measurements With Geodetic Electronic Distance-Measuring Equipment, by K. Holejko. RUSSIAN, per, <u>Pomiary Automatyka Kontrola</u>, No 10-11, 1903, pp 521-522. *Navy/APL J 300

Internal Oscillations in p-n-p-m Transistors, by N. A. Shekhotsov, E. D. Prokhorov, 9 pp. RUSSIAN, per, Radio i Etek, Vol VIII, No 10, 1963, pp 1783-1786. 9692131 FTD-TT-64-68

Electronics and Radio Communications of the Future, by Yu. Rumer, P. Borodovskiy, 7 pp. RUSSIAN, np. Sovetskaya Rossiya, No 104, Jul 13, 1963, p. 2. 9692321 FTD-TT-64-79

Electronic Simulation of Dynamic Processes in Hydraulic Mechanisms, by S. N. Kozhevnikov, A. V. Prazdnikov. RUSSIAN, per, <u>Teoriya Mashin i Mekhanizmov</u>, No 96-97, 1963, pp 19-27. *Navy/APL J361

Neutralization of an Ion Beam With Electrons in a Magnetic Field, by V. N. Danlkov, II pp. RUSSIAN, per, Irudy Inst Fiziko-Tekindelieskij, No 10, 1962, pp 80-80, 9692442 FTD-TT-64-176

. . . .

Scientific Electronics (Contd)

A New Method of Temperature Compensation for Superhigh Frequency Thermiseors for Power Measurements, by L. M. Zaks, V. M. Petrov, 10 pp. RUSSIAN, per, Trud Komiteta Standartov Mer i Izmeritel nykh Priborov, Vol LXV, No 125, 1962, pp 13-20. JPRS 24477

Certain Problems of Single Pulse Detection, by V. F. Nesteruk, N. N. Profiryeva. RUSSIAN, per, Trudy Leningrad Korablestroil Inst. No 30, 1962, pp 121-133.

Micro-Diffraction of Super-Fast Electrons, by N. M. Popov. RUSSIAN, per, <u>Yest Ak Nauk SSSR</u>, No 1, 1964, pp 39-44. SIC

Present Trends in Telemechanics, by V. A. R⁴in. RUSSIAN, per, Vest Ak Nauk SSSR, No 1, 1964, pp 105-107.

Magnetic Elements in Automation and Computer Engineering, by F. I. Kerbnikov, Yu. D. Rozentat¹, RUSSIAN, per, Yest Ak Nauk SSSR, No 1 1964, pp 107-108.

The Study of Process of Establishment of Electron Concentration Distribution Along the Radius in Positive Column of Gas Discharge, by T. A. Sanina, A. A. Sanin, RUSSIAN, per, Yest Moskey Univer Seriya III, F1z 1 ASILOM, No 2, 1963, pp 43-46. Navy Tr 3759/APL T955

Radio Electronics and Agricultural Science, by Chien Kio, 6 pp. CHINNESS, per, Wu haten-tien, No 3, 1964, pp 1, 2, JPRS 24350

Measurement of the Flow Resistance of a Duct With Multiple Contraction of its Cross Section, by Vaciav Dworak, Joseph Hak, et al, 9 pp. CZECH, per, <u>Elektrotechnicky Obzor</u>, Vol XLIX, No 4, 1900, pp 169-173. 9220776
AEC-Tr-6306

Report on the Research Program of the SODETEP, FRENCH, rpt, No 241, Nov 1963, pp 1-17. *ACSI 1-4540 11) 2204011964

Report on More Precise Measurement of Radar Echo Amplitudes. FRENCH, rpr, No 242, Nov 1963, pp 1-17. *ACSI 1-1541 ID 2204012004

Some Considerations Concerning the Performance of Fast Response Photomultipliers, by C. Cernigoi, I. Gabrielli, et al, 10 pp. FRENCH, per, Acta Electronica, Vol V, 1961, pp. 53-00. 9220772 AEC-UCRL-Fr-1000(L)

Electrical Conductivity of Liquid Hydrocarbons, by L. Bruninghaus. FRENCH, per, <u>Annales Combustibles Liquides</u>, Vol IV, 1929, pp 515-527. CEGB 2352 Scientific
<u>Biectronics</u> (Cond)

Load Phase Regulation, New Method for Automatic Regulation of Frequency of a Network Consisting of Many Generating Plants, by Francois Cahen. FRENCH, per, <u>Bulletin de la Societe Française des Glectriciens</u>, Vol III, No 34, 1933, pp 614-637. Dept of Interior ACS E57 No 74

Study of Current Monitors for a Linear Electron Accelerator, by R. Bergere, E. Delezenne, et al, 26 pp. FRENCH, per, Nuclear Instruments and Mothods, Vol XV, 1962, pp 327-354. 9220564

AERE-Harwell-Tr-928

Use of Commutation Magnetic Cores in Digital Logical Moduli, by D. Franc FRENCH, per, L'Onde Electrique, Vol XLII, No 430, Jan 1963, pp 59-67. *AGSI I-4453 1D 2204009764

Improvements in Pneumatic Tire Casings, for Vehicle Wheels, 9 pp. FRENCH, Patent No 1,140,534, Patent Office

Electronic Overcurrent Relay, 7 pp. FRENCH, Patent No 1,217,202. Patent Office

High-Voltage, Long-Distance Transmission, by F. Busemann. GERMAN, bk. Dept of Interior AC5 E57 No 75

Survey of Electroacoustic Transducers by Means of Linking Matrices, by Erwin Martin, 14 pp, GERMAN, per, <u>Archiv der Elektrischen Uebertragung</u>, Vol XVI, 1962, pp 600-608. Navy Tr 3775 USRI 41

The Underwater Spark as an Acoustic Impulse Source, by H. Drubba, H. H. Rust, 18 pp. GERMAN, per, Archiv fuer Elektrotechnik, Vol VII, 1953, pp 429-440. 9220859 ACSIL Tr 1440

Transmission Characteristics of Anode Modulated Telephony Transmitters With Highly Selective Antennae, by M. Dick, GERMAN, per, <u>Bulleun des Schwetzerischen</u> <u>Elektrotechnischen Vereins</u>, No 20, 1900, pp 936–971. NZDIA

Problem of High Voltage Interference With Telecommunication Cables, by F. Widl. GERMAN, per, Elektrizhaetswirtschaft, No 22, 1962, pp 823-833. NZDIA

Simple Method for Calculating the Sag of Overhead Line Conductors, by F. Mueller, GERMAN, per, <u>Elektrotechnik und Maschinbau</u>, Vol LXXX, No 1, 1963, pp 12-14, NZDIA

Chain Circuitry of Bridge Filters, by Werner Herzog, 18 pp.
GERMAN, per, Frequenz, Vol XVII, No 6, 1963, pp 322-344.
ACS1 1-4452
ID 220409664

Archamedian Spiral Antennas, by L. E. Mueller, K. Bahmann. GERMAN, per, <u>Hochfrequenztechnik und Elektroakustik</u>, Vol LXXII, No 5, 1963, pp 155-163. *F ID-11-64-555

Scientific Electronics (Contd)

Some Problems of Pulse Code Modulation, by Augustin Ditl. GERMAN, per, Hochfrequenztechnik und Elektroakustik, Vol LXXII, No 3, 1963, pp 177-186.

The Thermoelectromagnetic Pump, by S. Hufnagel, 22 pp. GERMAN, per, <u>Kerntechnik</u>, Voi V, No 7, 1963, pp 286-293. 9220769 AEC-Al-Tr-39

Studies of Propagation of Electromagnetic Waves Over an Absorbent Surface, by Erwin Meyer, Dietmar Eisfeld, 21 pp. GERMAN, per, Z fuer Angewandte Physik, Vol XV, No 1, 1963, pp 31-39. Navy Tr 3765/NRL 969

Determination of the Serviceable Life of Electronic Equipment, by K. Tarnay, HUNGARIAN, per, Merca en Automatika, No 5, 1962, pp 140-147, CEGB 2931

An Analytical Method in Statistical Mechanics, by Ryogo Kubo, 10 pp.
JAPANESE, per, <u>Bussetron Kenkyu</u>, No 1, 1943, pp 1-13, 9220793
AEG-UCRL-Tr-1030(L)

Double Layer Semico iductor Image Converter, by B. Paszkowski, A. Swit, et al. POLISH, per, Przegład Elektroniki, Vol IV, No 8, 1903.

*ACSI 1-4501
ID 2204041224
5256 MI Gp

Feed Systems for Parabolic Americas With Circular Aperture, by Adolfo Montalvo Sanz.

SPANISH, per, Revista de Telecomunicación, Vol XII, 1958, pp. 25-33.

Navy Tr 3701/APL 1957

The Fast Breeder Reactor, Rapsodic, by G. P. Zaleski, L. Vaurrey, 9 pp. SWEDISH, rpt, Power Reactor Experiments, Vicinia, 23-27 Oct 1961. 9220786

AEC-Tr-6310

Scientific Engineering

Scheme for Combining the Automation of Deformation and Heat Treatment, by V. T. Chirikov. RUSSIAN, bk, Aviomatizatsiya Protsessov Mashinostroyeniya Ak Nauk SSSR, Vol II, 1902, pp 152-157.
*BISI 3700

Testing Air-Breathing Engines, by V. M. Dorofeyev, V. Ya. Levin, 291 pp. RUSSIAN, bk. <u>Isnytaniya Vozdushno-Reaktiynykh</u> Dyigareley, 1901, pp 1-220. 9092370 FTD-TT-03-233

Measurements of Stresses in Machinery Components, by V. F. Yakovley, I. S. Inyutin, 111 pp.
RUSSIAN, bk, Izmereniya Napryazheniy Detaley Mashin, 1900, pp 1-114. 9692369
FTD-FT-63-731

Scientific Engineering (Contd)

Mathematical Simulation and Electric Circuits, 322 pp. RUSSIAN, bk, Mate Model i Elek Teery: Trudy Series po Metodam Mate Model i Teorii Elek Teerey, No 1, 1963, pp 1-247.

JPRS 24041

Design and Production Planning in Light Industry, A. I. Slonim, 124 pp. RUSSIAN, bk, <u>Organizatsiya Tekhnicheskoi Podgotovki</u> <u>Prolzvodstva na Priborostroitel-nom Predprlyatil,</u> 1960. OTS 63-11072 PL-480

Equipment and Apparatus for Determining Rock Pressures, by Sh. M. Bilikov. RUSSIAN, bk, Pribory i Apparatura Diya Issled Proyayleniy Goynovo Dayleniya. Dept of Interior TN7 E57 No 733

Fish Trawlers Energetic Installation Operating Conditions, by L. P. Korshunov. RUSSIAN, rpt, <u>Power Plants of Fishing Trawlers</u>, Lentigrad, pp 11-49. Navy Tr 3773 ONI 986

Modern Power Equipment in Fishing Trawlers, by L. P. Korshunov.
RUSSIAN, rpt, <u>Power Plants of Fishing Trawlers</u>, Leningrad, pp 128-143.
Navy Tr 5773
ONI 986

Construction of Prefabricated Reinforced-Concrete Pavements, by A. A. Gerberg, A. S. Osipov. RUSSIAN, bk, Strottel stvo Aerodromov, Moscow, Chapter IX, 1963, pp 286-294. ACIC

Post-Buckling Behavior of Cylindrical Shells, Part I. Axial Compression, by A. V. Pogorelov RUSSIAN, bk, Tsilindrichesklye Obolochki pri Zakriticheskikh Deformatsiyakh 1962, Josevoj. Szhatiye. 9220890-V NASA TT F-90

Post-Buckling Behavior of Cylindrical Shelis, Part II. External Pressure, by A. V. Pogorelov. RUSSIAN, bk, Tsilindrichesklye Obolochki pri Zakriticheskikh Deformatsiyakh, II Vneshneye davleniye, 1962, 9220890-V NASA TT F-90

Control and Stability In Ship Design, by K. K. Fedyayevdkiy, G. V. Sobolev, 420 pp. RUSSIAN, bk, <u>Upravlyayemost Korabiya</u>, Ledingrad, 1963, pp 1-375.
JPRS 24547

An Improved Version of the Universal Filter and its Use in the Frequency Analysis of Nonstationary Signals, by A. Ye. Birman, Yu. G. Kvallvasser. RUSSIAN, ..., Voprosy Dinamicheskoy Teorii Rasprostraneniya Seysmicheskikh Voin, No 6, pp 212-220.
*AID

Accelerated Thermal Treatment of No-Fines Concrete, by G. Buzhevich.
RUSSIAN, per, Beton i Zhelezobeton, No 3, 1953, pp 148-123.
CSIRO/No 6535
Evaluation of the Durability of Large-Sized Elements Made of Autoclaved Aerated Concrete, by F. S. Silayenkov.
RUSSIAN, per, Beton i Zhelezobeton, No II, 1961, pp 501-504.
GB/21/I C IIS

<u>ت</u>

Flat Aerated Concrete Slabs for Roofs and Garret Floors, by Ya. G. Sungatullin, et al. RUSSIAN, per, Beton i Zhelezobeton, No II, 1961, pp 504-507. GB/21/LC 1155

Principles of Constructing Automatic Electrical Measuring Devices for the Study of Deformation Due to Shrinkage, by V. Levidov. RUSSIAN, per, Beton i Zhelezobeton, No 5, 1962, pp 219-222. CSIRO/No 6164

Mechanism Controlling the Deformation of Concrete in Tension, by Yu. Kolegov. RUSSIAN, per, Beton i Zhelezobeton, No 2, 1963, pp 80-83. CSIRO/No 6538

Heat Conductivity of Expanded Clay Concrete, by N. Spivak, et al. RUSSIAN, per, Beton I Zhelezobeton, No 3, 1963, pp 137-140. CSIRO/No 6536

Effect of Duration of Steaming on the Strength of Concrete, by S. Mironov, et al. RUSSIAN, per, <u>Beton I Zhelezobeton</u>, No 5, 1963, pp 196-199. CSIRO/No 6539

Development of Plane-Parallel Boundary Layer in the Nelghborhood of the Critical Point of a Blunt Body, Set In Motion Impulsively, by Ye. M. Shakkov, 12 pp. RUSSIAN, per, Inzhenernyy Zhurnal, Vol II, No 3, 1962. 9692371

Hypersonic Flow Past Slender Blunt Elliptic Cones, by A. A. Bogacheva, M. D. Ladyzhenskly, to pp. RUSSIAN, per, <u>Inzhenernyy Zhurnal</u>, Vol II, No 3, 1902, 9692371
FTD-FT-63-79

FTD-TT-63-79

Laminar Boundary Layer With Reaction Front on a Porone Plate, by V. M., Yemell yanov, 8 pp. RUSSIAN, per, <u>Instrumenty Zhumal</u>, Vol II, No 3, 1902, 9692.371 FTD-TT-63-79

On the Behavior of Heated Plates and Stoping Shells in a Gas Flow, by V. V. Bolotin, 10 pp. RUSSIAN, per, Inzhenernyy Zhurnal, Vol II, No 3, 1902, 9022371
FTD-TT-63-79

On the Nature of Flow in the Stagnation Region, by V. Ya. Neyland, G. I. Taganov, 10 pp. RUSSIAN, per, Inzhenerayy Zhurnal, Vol II, No 3, 1902, 962,371
FTD-TT-03-79

On Plasma Acceleration by a Magnetic Field, by S. I. Fadeyev, 8 pp. RUSSIAN, per, <u>Inzhenernyy Zhurnal</u>, Vol II, No 3, 1962, 9692371
17 TP-77-63-79

The Cleaning of Live Insulators by a Discentinuous Stream of Water, by M. P. Fedotov. RUSSIAN, per, <u>Elek Stantsn</u>, Vol XXXIII, No o, 1962, pp. 66-69. CEGB 3137

Nozzle Dust Collector, by A. A. Gurvus. RUSSIAN, per, <u>Elek Stantsin</u>, Vol XXXIII, No 12, 1962, pp 10-13. CEGB 3062

Scientific Engineering (Contd)

Calculation of Economic MW and MVAr Distribution in a Power System WithGiven Limitations. RUSSIAN, per, <u>Elektrichestyo</u>, No 3, 1962. NZDIA

Automatic Control and Stability During Parallel Operation of Power Station Generators Supplying AC and DC Transmission Lines, by M. P. Kostenko, et al. RUSSIAN, per, <u>Elektrichestyo</u>, No 10, 1962, pp 1-8, NZDIA

Thermal Resistance of Turbine-Blade Base Joints, by O. T. H^tchyenko, V. M. Kapinos, RUSSIAN, per, <u>Energomash</u>, Vol V, No 6, 1959, pp 23-26.
*Redstone Arsenal

Seminar on Use of Electronic Computers in Hydraulics, by G. P. Skrebkov, 8 pp. RUSSIAN, per, <u>Gidrotekh Stroitel</u>, No 1, 1964, pp 60, 61, JPRS 24265

Rifect of Velocity Instability of an Unbounded Flow Past Bodies on the Coefficient of Heat Transfer, by L. I. Kudryashev, I. A. Gusev. RUSSIAN, per, <u>Lz Yysshirh Ucheb Zaved Aylat Tekh</u>, No 2, 1962, pp 152-158. Navy Tr 3700/APL T956

Production Tests of the Patening of Cable Wire in Two Baths, by I. E. Brainin, R. I. Budinshieto, RUSSIAN, per, <u>iz Vygshikh Ucheb Zaved Chern Metall</u>, No 6, 1961, pp 139-144. BISI 3119

Recrystallization of 40 Kh Steel in Hot Deformation, by V. P. Severdenko, P. P. Ankut.
RUSSIAN, per, 1z Yysshikh Ucheb Zaved Chern Metal,
No 3, 1961, pp 148-153.
*BISI 3673

Analysin of Heat Transfer Processes During Sintering by the Method of Suction, by S. G. Bratchikov, S. V. Baztlevich. RUSSIAN, per, <u>Iz Vysshikh Ucheb Zaved Chern Met</u>, No 6, 1963, pp 18-26. *BISI 3671

The Mechanism of the Reduction of Iron From Its Oxides, by E. S. Vorontsov. RUSSIAN, per, <u>IZ Yysshikh Ucheb Zaved Chern Metal</u>, NO 2, 1904, pp 13-18. *BISI 3721

The Structure of Fe-Al Alloys, by F. L. Edel¹man, L. I. Tushinski. RUSSIAN, per, <u>12 Vysshikh Ucheb Zaved Chern</u> Metal, No 2, 1964, pp 131-139. *BISI 3722

Principles for Choosing Austenitic Steels for Components Operating in Conditions of Cavitational Erosion, by I. N. Bogachev, R. I. Mints.
RUSSIAN, per, <u>Iz Vysshikh Ucheb Zaved Energet</u>, No 2, 1961, pp 97-102.
CEGB 3034

Experimental Study of Contact Heat Exchange, by M. E. Aerov, 8 pp.
RUSSIAN, per, <u>Kholodilhaya Teklinika</u>, Vol XL, No 1, 1963, pp 37-40. 9692458
DDC RSIC-162

Instantaneous Temperatures on Contact Surfaces Due to Friction, by B. P. Stoyukhin, 16 pp. EUSSIAN, per, <u>Nauch Dok Vysshey Shkoly</u>, <u>Mash i</u> <u>Prlb.</u> No 4, 1958, pp 73-81. 9692278 DDC RSIC-142

- 341

Analysis of Differential Electromagnetic Elements for Automatic Control Systems, by N. P. Kozlov, I. M. Krassov, et al, 12 pp. RUSSIAN, per, Priborostrovenive, No 1, 1964, pp 5-8. JPRS 24226

Some Problems of Control System Theory, by N. P. Kolpakova, 9 pp. RUSSIAN, per, <u>Priborostroyeniye</u>, No 1, 1964, pp 9-11. JPRS 24226

A Contactless Control Ring Relay Switch, by S. V. Volzhin, V. I. Minayev, et al, 9 pp.
RUSSIAN, per, <u>Priborostroyeniye</u>, No 1, 1964, pp 11-14.
JPRS 24226

The APP-1 Automat, by G. A. Matsiyevskiy, 9 pp. RUSSIAN, per, <u>Priborostroyentye</u>, No 1, 1964, pp 14-17. JPRS 24226

The Use of Self-Recording Devices for Programmed Control, by K. V. Artamonev, 5 pp. RUSSIAN, per, <u>Priborostroyentye</u>, No 1, 1964, pp 25, 26. JPRS 24226

Method of Investigating Corrosion by Measuring the Electrical Resistance of Specimens, by P. A. Akolzin, F. N. Ivanov. RUSSIAN, per, <u>Teplocnergetika</u>, Vol X, No 3, 1963, pp 8-12. CEGB 3216

Distribution of Firme Radiation Intensity Over the Height of Furnace Walls, by I. P. Epik, A. A. Ots, RUSSIAN, per, <u>Teploenergetika</u>, Vol X, No 3, 1963, pp 51-53, CEGB 3219

On the Stability of Self-Balancing Bridges, by V. V. Anokhina, V. I. Sergeyev. RUSSIAN, per, Trudy Institut Mashinovedentya Seminar po Tochnosti v Mashinostroyenly i Priborostroyenly, No 17, 1963, pp 3-11.

Optimization of One of the Schemes of Finding Inaccuracies, by Yu. V. Lyubatov. RUSSIAN, per, Trudy Institut Mashinovedentya Seminar po Tochnosti v Mashinostroyeniy i Priborostroyeniy, No 17, 1963, pp 589-597.

Synthesis of Mechanisms for Burnishing of Aerodynamic Surfaces, by B. V. Shaskolskiy, 16 pp. RUSSIAN, per, Trudy Tret year Soveshchaniya Poonovnym Problemam Teorif Mashin I Meklanizmov: Analiz I Sintez Mekhanizmov, 1963, pp 180-194, JPRS 24052

Synchronous Servo-System With Variable Transfer Coefficient, by E. D. Demidenko. RUSSIAN, per, Yest Ak Nauk SSSR, No. 1, 1964, pp 36-38. SIC

The Dose Rate of Penetrating Electrons of the Outer Belt, by Ye, Ye, Kovalev, A. V. Larichev, 5 pp. RUSSIAN, per, Voprosy Dozimetrii i Zashchity of Lzucheniy, No 2, 1963, pp 105-108.

JPRS 24000

Some Problems in Optimum Control Theory, by Yu. V. Yegorov, 22 pp. RUSSIAN, per, <u>Zhur Vychil Matemat i Matemat</u> Fiz, Vol III, No 5, Sep. Oct 1963, pp 887-904. JPRS 24072 Scientific Engineering (Contd)

Determining the Distribution Function for Length of Maximum Carry, by V. M. Mikhelev, 10 pp. RUSSIAN, per, Zhur Vychisi Matemar i Matemat Fiz, Vol III, No 5, Sep. Oct 1963, pp 942-949, JPRS 24073

Shipbuilding in Communist China, 195 pp. CHINESE, per, Chung-kuo Tsao-chiuan, Nos 1, 3, 4, 1963.

JPRS 24122

Vibration Finishing of Edges of Punched Parts, by Yeh K'o-wu, Li Chin-chih, 19 pp. CHINESE, per, Shung-hai Ch-haich, No 4, 25 Apr 133, pp 4-9. JPRS 24468

On the Evaluation of Creep Tests, by V. Foldyna. CZECH, per, thundeke Listy, Vol XIV, No 12, 1959, pp 1172-1176. CEGB 3166

On the Structure of the Iron - Iron Oxide Interface and the Insolubility of Oxygen in High-Purity Iron. Chapter IV Only, Conclusion, Bibliography, by R. Sifferion. FRENCH, rpt. Publications Scientifiques et Techniques du Ministere de l'Air, Paris, Vol CiV, 1961, pp 52-64. *3181 3054

New Variations in the Basic Arrangements of a Reactor and of a Fuel System Apparatus, by R. Martin, B. Salteevsky. FRENCH, rpt, Solutions Nouvelles de Disposition Generale du Reacteur et de Dispositif de Manutention du Combustible, 1962.

Investigating Deformation by Means of Gratings, by P. Dantu. PRENCH, per, <u>Annales Institut Technique du</u> Hariment et des <u>Trayaux Publics</u>, No 121, 1938, pp 78-87. CEGB 3089

Contribution to the Study of Cyanides, Scaffolding, and Disintegration in the Blast-Furnace Stack, by Logeling.
FRENCH, per, Centre de Documentation Siderurgique Circulaire d'Informations Techniques, No 3, 1953, pp 465-492.
BIST 3103

Observations on the Phenomena of Deterioration in Blast-Furnace Shafts, by M. J. Schoendoerffer, FRENCH, per, Centre de Documentation Siderurgique Circulaire d'Informations Techniques, Vol XIX, No. 4, 1962, pp. 917-946.
BISI 3421

Operation of Blast Furnace No I at Jocuf, Societe de Wendel, by G. Foutonneau, P. Levín, FRENCH, per, <u>Comptes Rendus des Scances de la Societe de Biologie</u>, No 9, 1963, pp 1967-2004.

Palaminy Chute Canal Bank Revetment With Waterproof Bituminous Concrete, by G. Valet. FRENCH, per, <u>Construction</u>, Vol XV, No 6, 1960, pp 270-276. Expt of Interior FC823 A358 No 373

The Adaption of the C.T.I.P. Recuperator to the Cupola for Preheating the Blast to 500°C, by M. G. Ulmer. FRENCH, per, <u>La Fonderie Belge</u>, Vol XXXIII, No 2, 1963, pp 55-61. BISI 3539

New Control Equipment for ARC Furnaces, Part I, II, by A. Wavre, FRENCH, per, <u>Journal Due Four Electrique et des Industries Electrochimiques</u>, No 1, 1064, pp 19-22. *BISI 3741

New Control Equipment for ARC Furnaces, Part III, PRENCII, per, Journal Due Four Electrique et des Industries Electrochimiques, No 2, 1964, pp 51-57. *BISI 3741

Tensile Strength and Moisture Content of Paper, by H. Pellinen. FRENCH, per, Paperi Ja Puu, Vol XXIII, No 15, 1941, GB/15

Corrosion of Bollers at Lourches Power Station, Part 1, by A. Mache. FRENCH, per, Revue Generale de Thermique, Vol I, No 6, 1962, pp 27-40. CEGB 2956

Corrosion of Botlers at Lourches Power Station, Part II, by A. Mache. FRENCH, per, Revue Generale de Thermique, Vol I, No 7, 1962, pp 23-32. CEGB 2957

Ships and Methods for the Study of Underwater Construction, by G. Ortolan, 9 pp. FRENCH, per, Revue Maritime, No 201, Jul 1963, pp 849-865. Navy Tr 3753/ONI 984

Experimental Study of Roll Flattening and Bendling in the Cold Rolling or Frat Products, by B. Fazan, J. C. Albert. FRENCH, per, <u>Revue de Metallurgie</u>, Vol LX, No 1, 1963, pp 49-58. *BISI 3701

The Quest for High Driving Rates in Blast Furnaces, by F. Paschal. FRENCH, per, Revue de Metallurgie, Vol LX, No 7/8, 1963, pp 623-629. BISI 3529

The Bauschinger Effect in Compressive Working, FRENCH, per, Revue de Metallurgia, Vol LX, No 10, 1963, pp 859-861.

Op autional Control of the Blast Furnace Charged With Agglomerate: Theoretical Study of, and Experience With, Control by Means of a Commercial Counter Device, Part I, II, by C. Staib. FRENCH, per, <u>Revue de Metamurgie</u>, Vol LXI, No 1, 1964, pp 1-25. *BISI 3700

Experimental Studies of Some Physical Phenomena in Top-Blowing, by E. Denis. FRENCH, per, Revue Universelle des Mines, No 9, 1903, pp 367-383. HISI 3538

Scientific Engineering (Contd)

Pellitization of Iron Ore and Its Roasting in a Rotary Furnace, by A. Bragard, P. Parmentier. FRENCH, per, Revue Universelle des Mines, No 4, 1964, pp 1-8.
*BISI 3704

Continuous and Automatic Control of the Humidity of Sinter Mix, Application of Electric Conductivity Measurements, by I. Harveng. FRENCH, per, Rovue Universelle des Mines, Vol CVII, 1964, pp 27-33. *NISI 3661

Les Ansercuilles Power Station, Automatic Wagon Discharge, by J. Lamborot. FRENCH, per, <u>Technique Moderne</u>, Vol LIV, No 10, 1962, pp 435-442. CEGB 3072

Novel Method of Intravascular Impregnation of Timber With Various Substances, by Auguste Boucherio, 9 pp. FRENCH, Patent No II,061. Patent Office

Improvements Relating to Electronic Vacuum Pumps, 6 pp. FRENCH, Patent No 958,306. Patent Office

Flexible or Elastic Wall Pump or Motor System, by Marcel-Edmond-Celestin Renaud, 9 pp. FRENCH, Patent No 1,246,644. Patent Office

Annealing of Strip in an Open Coll. FRENCH, Patent No. 1,332,495. CRL/1 0159

Formation of the Yield Point in Mild Steel as Affected by the Conditions of Testing, by S. Schwaigerer. GERMAN, rpt, Jan 1939. BISU 1656

Improving the Efficiency of Heat Protective Glasses Through Air Cooling, by 1, Goss, GERMAN, rpt, No 32, Jan 1964. BISI 3668

Principles and Performances of Inert-Gas Annealings inclusive of Conditions for the Carburizing Annealing of Iron, by W. Baukloh. GERMAN, rpt, Akademie Verlag, Berlin, 1949. *เม**รา** 3708

Determination of Quality Characteristics for VTOL Power Plants - A Contribution to Project Research, by Luty von Bonin. GERMAN, rp., Bericht aus dem Institut fuer Strab-lantriebe der Deutschen Forschungsanstalt fuer Luft-Raumfahrt e.v., Braunschweig, 56 pp. ACSII-4449-A ID 2204009464

The Influence of Various Power Plants Upon the Operation Periods of Fast VTOL Aircraft. GERMAN, rpt, Bericht aus dem Institut füer Strahlantriebe der Deutschen Forschungsanstalt füer Luti-Raumfahrt e.v., Braunschweig, 17 pp.

4ACSI 1-4449-B
1D 2204009464

A New Type of Non-Destructive Testing Method for Spot Weldings, by Gunter Wilkens. GERMAN, rpt, <u>Mitteilungsblatt fuer die Amtliche</u> Material-Prufung in Niedersachsen, No 2/3, 1962/63, pp 28-31. *Redsjone Arsenal

14 Years of LD Practice, by R. F. Rinesch.
GERMAN, rpt, Paper Presented at the International
Congress on Oxygen Steel Plants at Le Touquet
and Dunkirk, 23-26 Sep 1963.
BISI 3482

VTOL Power Plants, by K, Grasmann. GERMAN, rpt, VTOL Triebwerksanlagen, 17 Jul 1963, 53 pp. *ACSI I-4450 ID 2204009564

Linear Programmes. A Model Type in Operational Research, by B. Wiczorke. GERMAN, per, Archiv fuer Eisenhuttenwesen, Vol XXXIV, No 3, 1963, pp 217-221.
*BISI 3695

Costing System of Energy Balances in a Steelworks, Part II, by R. Graef. GERMAN, per, Archiv fuer Etsonhuttenwesen, Vol XXXIV, No 4, 1963, pp 307-316. *BISI 3615

On the Theory of Drag-Rolling at Room Temperature, by H. Lippmann, O. Mahrenholtz. GERMAN, per, Archiv fuer Eisenhuttenwesen, Vol XXXIV, No 0, 1963, pp 419-423. BISI 3628

Investigation on the Formation of Banded Structures in Hypocutectoid Steels Using Samples With Artificial Segregations, by W. Peter, H. Finkler.
GBRMAN, per, Archiv fuer, Hisenhutenwesen, Vol XXXIV, No 8, 1963, pp 605-616.

The Anclastic Elongation of High Strength Steel Wire at Room Temperature, by M. Aspfelbacher. GERMAN, per, <u>Archiv fuor Elsenbuttenwesen</u>, Vol XXXIV, No 10, 1963, pp 733-744.
*BISI 3702

Magnette Measuring Methods for the Exact Determination of Residual Austenite, by S. Muller, R. Kohlkaus.
GERMAN, per, <u>Archly fuer Elsenhuttenwesen</u>, Vol XXXIV, No 10, 1963, pp 755-759.
**BISI 3705

Investigations of Martensitic Structures Using Light Microscopy, by W. Pepperhoff, H. E. Buhler. GERMAN, per, Archiv fuer Eisenhuttenwesen, Vol XXXIV, No 11, 1963, pp 839-843. BISI 3565

Development, Design and Calculation of Mathematical Model of a Blast Furnace, Part I, by R. Wartmann, GERMAN, per, <u>Archiv fuer Eisenbuttenwesen</u>, Vol XXXIV, No 12, 1963, pp 879-885. BISI 3581

Development, Design and Calculations of Mathematical Model of a Blast Furnace, Parts II & III, by R. Wartmann, GERMAN, per, <u>Archiv fuer Eisenhuttenwesen</u>, Vol XXXV, Nol, 2, 1964, pp 15-20; 159-167.

Lifting Capacity of Discharge Walls in Ball and Tube Mills, by W. Ohe. GERMAN, per, Authorogums-Technik, Vol III, No 3, 1902, pp 89-90. CEGB 3176

Crushing Hard Materials and Wear, by H. Wahl, et al. GERMAN, per, Authoretiungs-Technik, Vol IV, No 3, 1963, pp 91-111. CRL 11 1390

Scientific Engineering (Contd)

Strip Slitting Equipment for Electrical Strip, by H. Schroer. GERMAN, per, <u>Bander Bleche Rohre</u>, No 3, 1964, pp 136-139. *BISI 3732

Dust Removal From the Waste Gases in Oxygen Steel Refining Under Particular Consideration of the LD Process. Problem of Dust Removal in LD-Steel Plants, by H. Schaden.
GERMAN, per, Berg-und Huttenmannische Monatshefte, Vol CIV, 1959, pp 17-21.
*BISI 3736

Contribution to the Study of Deformation Processes During Forging, by M. Kronels, T. Skamletz. GERMAN, per, <u>Derg und Huttenmannische Monatshefte</u>, Vol CIX, No 1, 1964, pp 1-13. *NISI 3663

The Welding of Modern High Tensile Steels, by B. Kjellberg. GERMAN, per, Berg und Huttenmannische Monatshefte, Vol CIX, No 1, 1964, pp 13-25. *BISI 3664

Estimation of the Cold-Deformation Capacity of Sheet Steel and Observation of the Limit Point of Its Capacity for Cold-Deformation During Cold-Rolling, by E. Franke.
GERMAN, per, Blech, Vol IX, No 11, 1962, pp 595-597.
BISI 3691

Digital Thickness Control for Cold Rolling Mills, by J. Ullmann. GERMAN, per, <u>Blech</u>, Vol X, No 3, 1963, pp 178-180, BISI 3314

Axial Cylindrical Roller Bearings in Strip and Sheet Mill Stands, by G. Uerlings. GERMAN, per, <u>Blech</u>, Vol X, No 4, 1963, pp 172-175. BISI 3313

The Application of Weighing and Recording Plani in Rolling Mills, by H. Weinberg, GERMAN, per, <u>Blech</u>, Vol. X, No. 7, 1963, pp. 433-442. *BISI 3693

Influence of the Particle Size of Hard Coal Samples on the Result of the Dilatometer Method, by F. G. Kreuler. GERMAN, per, <u>Brennstoff-Chemie</u>, Vol XLIV, No 10, 1963, p 310, *BISI 3709

Some New Operating Principles With Fluid Beds, by E. Wicke, 12 pp. GERMAN, per, <u>Chemical Engineering Science</u>, Vol VI, 1957, pp 160-169. 9221932 AEC-Tr-6318

Flue Gas Monitoring of Industrial Plant With a Process Photometer, by H. Hummel, J. Ebert. GERMAN, per, <u>Chemie Ingenieur Technik</u>, Vol XXXIV, No 10, 1902, pp 704-708. CEGB 3172

Experimental Determination of the Strens-Deformation Curves of Drawn Material With Residual Stresses of Type 1, by A. Peiter, GERMAN, per, <u>Drain</u>, Vol XIV, No 10, 1963, pp 023-637.
*BISI 3718

- 63 -

Experience With Silicone Grease as a Protection Against Flashovers of Insulators Due to Pollution, by P. Ignacz. GERMAN, per, <u>Riektrizitatswirtschaft</u>, Vol LXII, 1963, pp 29-36.

High Voltage Testing Equipment for Cables and Lines, by K. Herzig, GERMAN, per, Elektrizitaetswirtschaft, No 2, 1963. NZDIA

Despoint Measurement of Flue Gases, by R. Welchert, GERMAN, per, Energie, Vol XIV, No 10, 1962, pp 415-419, CEGB 3058

Technical Machining Investigations of Ceramic Cutting Materials, by E. Heymel. GERMAN, per, <u>Fertigungstechnik</u>, Vol VII, No 11, 1957, pp 496-497. CSIRO No 6105

Energy Balance of the Thermal Processes in the Iron and Steel Industry, by Y. J. Szargut. GERMAN, per, <u>Freiberger Forschungshefte</u>, No 208, 1962, pp 81-103.

Deformation Resistance of Steels to Hot Working and Structural Changes Due to Hot Working, by P. Blath, C. Rossard, GERMAN, per, <u>Freiberger Forschumpshefte</u>, No 69 B, 1962, pp 5-17.
*BISI 3690

Geo-Mechanical Investigations and Principles for the Determination of Rock Pressure From Boschole Deformations, by G. Everling, GERMAN, per, <u>Gluckauf</u>, Vol XCVI, No 7, 1960, pp 390–409. GRL/T 1350

Pressure on Seam and Filling, by O. Jacobi, GERMAN, per, <u>Gluckauf</u>, Vol XCVI, No 7, 1900, pp 409-418. CRL/F 1151

Changes in Stress in Regions Affected by Mining, by G. Everling. GERMAN, per, <u>Gluckauf</u>, Vol XCVI, No 7, 1960, pp 428-434. GRL/T 1354

Situation in International Sawing Research, by G. Pahlitzsch. GERMAN, per, <u>Holz Als Rob- und Werkstoff</u>, vol XX, No 10, 1962, pp 381-392. CSIRO/No 6432

Wer Conservation and Shin-Down Corrosion of Steam Generators, by K. Freier. GERMAN, per, <u>Maschinenschaden</u>, Vol XXXVI, No. 4, 1903, pp. 50-55. CEGB 3195

Determination of Curie Temperature of Ferromagnetic Specimens in a Microfurnace, by F. Brandsnaetter. GERMAN, per, Metall, Vol XVII, No 12, 1903, pp 1200-1212. *10S1 3712

On the Effects of the Inhibitor Diorthorotyl Thiourea on the Corrosion of Iron in Dilute Sulphuric Acid, by W. Machu, V. K. Gooda. GERMAN, per, <u>MetalloberHache</u>, Vol XVI, No 6, 1962, pp 171-174. CFC10 2895

Scientific Engineering (Contd)

Effect of Composition and Heat Treatment on the Properties of Steel 14.MoV.63., by B. Baarlecken, K. Lorenz.
GERMAN, per, Mitteilungen der Forschungagesellschaft Blechverarbeitung. Vol LXXXVIII, No 2, 1964, pp 1-26.
*BISI 3720

Ten Years of Austenitic Steels in Boiler Operation, by W. Ruttmann, N. Brunzel.
GERMAN, per, <u>Mitteilungen der Vereinigung der Grosskesselbesitzer</u>, No 10, 1962, pp 310-326.
CEGB 2943

Research at C.E.R.L. Into Fireside Fouling and Corrosion of Power Station Botlers, by P. J. Jackson. GERMAN, per, <u>Mittellungen Vereintgung der</u> <u>Grosskesseibesitzer</u>, No 8, 1960, pp 220-231. CEGB 3249

Measurements for Determination of Piston Flutter in High Speed Reciprocating Engines, by II, Steinbrenner, 10 pp. GERMAN, per, Motortechnische Zeitschrift, Vol XXII, No 7, 1961, pp 201–205. 9220856. A.C.S.I.L. Tr 1508

Determination of Traffic Capacity in Lost-Call Systems by Means of Artificial Telephone Traffic, by G. Dietrich, H. Wagner, GERMAN, per, <u>Nachrichtentechnische Z</u>, Vol XVI, No 6, 1963, pp 289-296. GB/54/1854

Tandem-Furnace for Refining Low-and High-Phosphorus Iron, by F. Bartu. GERMAN, per, <u>Radex Rundschau</u>, No 5, 1963, pp 573-584.
HISI 3517

Increasing Open Hearth Furnace Output by Oxygen Injection, by G. VioH, GERMAN, per, <u>Radex Rundschau</u>, No 2, 1964, pp 3-19. *BISI 3737

How to Calculate the Gooling Rates of Rolled Products on Cooling Beds, by W. Krause. GERMAN, per, <u>Stahl und Elsen</u>, Vol LXXXIII, No 5, 1903, pp 602-604. *BISI 3692

Effect of Hot Blast Temperature on the Operating Results of the Blast Furnace, by W. Zischkale, G. Heynert, GERMAN, per, <u>Stabl and Efgen</u>, Vol LXXXIII, No 8, 1963, pp 1117-1125. BISI 3560

Use of Convectors in the Annealing of Narrow and Medium-Width Strip in Bell-Type Furnaces, by W. Feige, et al. GERMAN, per, <u>Stabl und Eisen</u>, Vol LXXXIII, No 19, 1963, pp 1153-1159.

Temperature Measurement and Distribution During Heat Treatment in an Electrically Heated Experimental Furnace, by K. Schweyher. GERMAN, per, Stahl und Eisen, Vol LXXXIII, 1963, pp 1102-1169. PISI 3564

Influence of Rolling Conditions on the Mechanical Properties of Heavy Plane, by J. Degenkolbe, W. Neuhaus. GERMAN, per, <u>Stahl und Eisen</u>, Vol LXXXIII, 1963, pp. 1294-1302. BISI 3490

Industrial-Scale Trials on Increasing the Blast Furnace Output by Charging Pellets, by U. Petersen, rurnace Output by Charging Pellets, by U. Petersen, H. Kahlhofer, et al. CERMAN, per. Stabl und Biaen, Vol LXXXIII, No 23, 1963, pp 1397-1407. HB 6122

Electric Hot Topping of Cast Slabs of Uncapped Carbon Steel, by H. J. Kirschning. GERMAN, per, Stahl und Eisen, Vol LXXXIII, 1963, pp 1433-1440. BISI 3552

Investigation of the Pressure Exerted by the Stock in the Blast Furnace, by M. Hansen. CERMAN, por, <u>Stabl und Elsen</u>, Vol LXXXIII, 1963, pp 1506-1508. Bisl 3554

Tool Shapes for Drawing Down Difficulty Workable Stoels, by M. Kronels, T. Skamletz. GERMAN, por, Stahl und Elsen, Vol LXXXIII, 1963, pp 1546-1553. BISI 3551

Patigue Strength of Springs of Oil Quenched and a argue scrength of Springs of Off Quenched and Tempered Patented Hard-Drawn Spring Wire, by F. Biellob, H. Born. GERMAN, per, Stahl und Eisen, Vol LXXXIII, 1963, pp 1605-1616. *BISI 3719

The Effect of Different Patenting Conditions on the Structure and Mechanical Properties of Drawn Steel Wire With Particular Reference to the Influence of Manganese Content, by H. J. Bockenhoff, C. Eisenhuth. GERMAN, per, <u>Staht und Eisen</u>, Vol LXXXIII, 1963, pp 1616-1625. BUST 3590

Calculation of Desulphurisation in a Number of Steelmaking Processes, by M. Wahlster. GERMAN, per, <u>Stahl und Elsen</u>, Vol LXXXIV, 1964, pp 63-73. BISI 3587

Machinability Tests by the Weight Operated Feed Method on Free Cutting Steels With Approximately 0.09% C, by H. Becker. GERMAN, per, <u>Staht und Eisen</u>, Vol LXXXIV, No 2, 1964, pp 250-259.
*BISI 3074

Supplying Steel Plants With Oxygen, by Max Seidel-GERMAN, per, <u>Stabl und Eisen</u>, Vol LXXXII, No 5, 1962, pp 261-268. HB 5598

The Electro-Technical Features of a New Cold Rolling Tandem Train, by F. Claussen, G. Gleissner, GERMAN, per, Stahl und Eisen, Vot LXXXIV, 1904, pp 389-403, *BISL 3723

Operating Measurements on a Four-High Reversing Stand for Cold Rolling Wide Strip, Part I, by F. Lindemann, O, Pawelski, GERMAN, per, <u>Stabl and Eisen</u>, Vol LXXXIV, 1904, pp. 403-410.

Experiences Made With Measurements in the Study of a Reversible Cold Rolling Mill Train, by W. Numberg, G. Ludwig. GERMAN, per, <u>Stant and Ersen</u>, Vol LXXXIV, 1964, pp 411–421. *BISI 328

Scientific Phylineering (Contd)

The Scaffold-Free Blast Furnace in Modern Construction of Large Blast Furnaces, by A. Otto, B. Lenger.
GERMAN, per, Technische Mitteilungen Krupp,
Vol XXI, No 4, 1968, pp 207-213.
BISI 3707

Tension, Bending, and Torsion of Bars Containing a Transverse Hole, by August Thum, Wilhelm Kirmser. GERMAN, per, Verienes Deutscher Ingenieure Forschungsheft, Vol XIV, 1943, pp 1-33.

*Redstone Arsenal

Tests on Stress Distribution in Perforated Tensile Bars, by E. Preuse. GERMAN, per, <u>Vercines Deutscher Ingenteure Z</u>, Vol LVI, No 44, 1912, pp 1780-1783. *Redstone Arsenal

Experiments on the Effects of Transverse Holes. Splines, and Diameter Changes on the Torsional Patigue Strength of Shafts, by W. Harold. GERMAN, per, Vereines Deutscher Ingenieure 2, vol LXXXI, No 18, 1937, pp 505-509.

Fatigue Tensile-Strength of Test Bar Heads, GERMAN, per, Vereines Doutscher Ingenieure Z, Vol LXXXIII, No 18, 1939, pp 513-514.
*Redstone Arsenal

The Non-Destructive Testing of Boiler and Superheater Tubes, GERMAN, per, <u>Vereinisang der Grosskesselbesitzer</u>, No 2, 1904, pp 26-52. *BISI 3703

Operational Chart as Criterion of the Shape and Performance of a Drill, by H. Klein. GERMAN, per, Werkstattistechnik und Maschinenbau, Vol XLVII, No II, pp 597-603, CSIRO/No 0100

On the Tension Increase Due to Circular Holes In a Plate Under Stress, by Th. Poescial. GERMAN, per, Z fuer Angewandte Mathematik und Mechanik, Vol 1, 1921, pp 174-180. ⁸ Pedstone Arsenal

Heat Treatment of Grain-Ortented Relled Magnetic Materials in a Continuous Furnace, by E. Calamari. ITALIAN, per, <u>La Metallurgia Italiana</u>, Vol LV, No 3, 1963, pp 107-111. *IJSI 3680

Rationalization of Forging Large Rings and Crowns, by G. Papuli. FTALIAN, per, <u>La Metallurgia Italiana</u>, No 9, 1963, pp 456-460. *BISI 3699

Operation of the Terni Continuous Casting Plant, by M. Signora, R. Cardano. ITALIAN, per, <u>Rivista de Ingegneria</u>, No 7, 1962, *BISI 3685

Corrosion Proof Plating of Carbon Steels by Electro-Deposition in Inert Gas Mig Process, by L. Cosimi, ITALIAN, per, <u>Rivista Italiana della Saldatura</u>, Vol XIV, No 3/4, 1962, pp 76-73. J31SI 3612

Place-Shaped Plaster Support, by G. Stalifnetz, 10 pp. TTALIAN, Patent No 528,697. Patent Office

Casings for Pneumatic Tires for Vehicle Wheels of All Kinds, by S. Pirelli, 16 pp. ITALIAN, Patent No 529,370. Patent Office

System and Related Devices for Instantaneous Indication of the Length of the Stitch Being Formed in Flat Knitting Machines, by Mario Goisis, Il pp. ITALIAN, Patent No 582,349. Patent Office

Continuous Temperature Measurement of an Electric ARC Furnace, by A. Yamaki. JAPANESE, per, <u>Denki Seiko</u>, Vol XXXIII, No 4, 1962, pp 280-285. BISI 3462

Corrosion of Mild Steel in Alkaline Solution at High Temperature and Pressure, by J. Kato, Y. Arai, JAPANESE, por, <u>Journal of the Chemical Society</u>, Vol LXIII, 1960, pp 1576-1579.
CEGB 3038

Continuous Determination of the Oxygen Dissolved in Molten Steel by Electromotive Force Measurement and Its Application to Several Experiments, by M. Ohtani, K. Sanbogt, JAPANESIE, per, <u>Tetsu-to-Jiagane</u>, Vol XLIX, No 1, 1963, pp 22-29, *BISI 3670

Accelerated Recrystallization of Cold-Rolled Low Carbon Sheets, by F. Staub, L. Cicelak, POLISH, per, <u>Archiv Hutnictwa</u>, Vol VII, 1962, pp 333-344. *BISH 3660

Scientific Fuels & Propulsion

Gas Turbines in Alteraft Propulsion, by G. S. Zhiritskiy, 731 pp. RUSSIAN, bk. <u>Gasovyve Furbiny Avlatsionnykh</u> <u>Dylgateley,</u> Moscow, 1963, pp 1-608, JPRS 24549

Gasification of Pulver(sed Fuel in Pulsed Flow, by D, Yu. Gamburg. RUSSIAN, per, <u>Gaz Prom</u>, Vol XII, No 5, 1960, pp 12-16. CEGB 2283

Industrial-Scale Tests of the Progressive Crushing of Coals, by W. Krause, et al. POLISH, per, Koks-Smola-Gas, No 1, 1903, pp 7-12, CRL/1 1303

Scientific Materials & Metallurgy

Aluminum Alloys, No 3--Deformable Alloys, by I. N. Fridylander. (SF-3188) RUSSIAN, bk, <u>Alyuminiyevyye Splavy, Vypusk 3, Deformiruyeniyye Splavy</u>, Moscow, 1904, pp 1-407.

Scientific Materials & Metallurgy (Contd)

Nonferrous Metals, by G. A. Dadayan, 16 pp. RUSSIAN, bk, <u>Bogatstua Nedr Armenti</u>, Yerevan, 1963, pp 11-43. JPRS 23962 · 1.2 .

Gas Flame Brazing of Metals, by G. A. Asinovskaya, 115 pp. RUSSIAN, bk, Gazoplamennaya Payka Metallov, Moscow, 1963, pp 1-128. JPRS 24345

Applying Coatings on Titanium and Titanium Plating, by N. D. Tomashov, 9 pp. RUSSIAN, bk, Korroziya i Zashchita Titana, 1963, pp 147-153.

JPRS 23913

Melting and Pouring of Rust-Resistant Tool Steels in Vacuum Induction Furnaces, by K. K. Chuprin, V. P. Grechin, et al., 9 pp.
RUSSIAN, bk, <u>Primenentye Vakuuma v Metallurgi</u>, Moscow, 1963, pp 14-21.
JPRS 24170

Fechnology of Precision Casting of Heat-Resisting Alloys in Vacuum, by N. D. Potashnikov, 6 pp. RUSSIAN, bk, <u>Primenentye Vakuuma v Metallurni</u>, Moscow, 1963, pp 22-26.
JPRS 24170

Influence of Vacuum Melting on Properties of Steels E1-840, E1-852, E1-847, and E1-437B, by V, M, Amonenko, I, S, Bolgov, 5 pp. RUSSIAN, bk, <u>Primenentye Vakuuma v Metallurgi</u>, Moscow, 1963, pp 61-64.
JPRS 24170

Improving Heat Treatment of Magnetically Soft Alloys In a Vacuum, by N. I. Lapkin, 10 pp. RUSSIAN, bk, <u>Primepentye Vakuuma v Metallurgi</u>, Moscow, 1963, pp 237-248. JPRS 24170

Production of Clad Stainless Steel, by F. A. Ksenzuk, N. A. Froshchenkov, 10 pp. RUSSIAN, bk. <u>Product i Ordelka Polosovov Nerzhaveyuschchev Staley, Moscow, Chapter X, 1963, pp 190-196, JPRS 24422</u>

Uranium Corner of the U-Al-Fe Phase Diagram, by D. K. K. K. R. RUSSIAN, bk, Stroyeniye 1 Svoystva Splavov Urana, Tortya Tstrkondya, Moscow, 1963, pp 16-21.
JPRS 24347

Effect of Repeated Quenchling on Crackling of Uranium Alloys, by A. F. Semenchenkov, O. S. Ivanov, 14 pp.
RUSSIAN, bk, <u>Stroyeniye I Svoystva Splavov Urana, Toriya i Tsirkoniya</u>, Moscow, 1963, pp 47-60.
JPRS 24347

Kinetics of Transformation by Sharp Quenching of the 5-Phase In Alloys of Uranium With Aluminum, Silicon, Iron, Nickel, Molybdenum, and Fissium, by A. T. Semenchenkov, O. S. Ivanov, 8 pp. RUSSIAN, bk, Stroyenlye I Svoystva Splavov Urana, Torlya i Tsirkoniya, Moscow, 1963, pp 61-69.

JPRS 24347

State of Impurities With Respect to Tempering Temperature of Quenched Uranium Alloys, by A. F. Semenchenkov, O. S. Ivanov, 7 pp. RUSSIAN, bk, <u>Stroyeniye i Svoysiva Splavov Urana, Toriya i Tsirkoniya</u>, Moscow, 1963, pp. 70-76.

JPRS 24347

<u>-</u>

Ships Made of Plastic Materials, by B. A. Arkhangel'skly, I. M. Al'shits. (DC-10512) RUSSIAN, bk, <u>Suda iz Plastmass</u>, Leningrad, 1963, 160 pp.

Welding of Titanium Alloys, by M. V. Poplavko, N, N. Manuylov, et al, 58 pp.
RUSSIAN, bk, Svarka Tsvetnykh Metallov i
Splavov Sbornik Statey, Moscow, 1961, pp 72-110,
JPRS 24521

Electrosiag Welding, by N. I. Kakhovskiy, Yu. N. Gotal'skiy, et al, 89 pp. RUSSIAN, bk, <u>Tekhnologiya Mekh Dugovoy i</u> <u>Elektroshlakovoy Syarki</u>, Moscow, 1963, pp 244-314. JPRS 24559

Thanium Equipment in the Production of Nickel, by G. M. Itel'son, V. B. Zhilkin, 101 pp. RUSSIAN, bk, <u>Titanovoye Oborudovaniye v Prolzyodstve</u> Nikelyn, 1963, pp. 1-126.
JPRS 24269

Welding of Nicotum by Vacuum Arc and Electron Beam Melting, by Ye. I. Istomin, Yu. P. Gumenyuk, 6 pp. RUSSIAN, per, <u>Avtomat Svacka</u>, No 1, 1964, pp 25-27. JPRS 24521

Electrosiag Build up of Certain Forms of Forging Dies, by B. V. Danilchenko, V. P. Subbotovskiy, et al, 8 pp. RUSSIAN, per, <u>Avtomat Svarka</u>, No 1, 1964, pp 71-74. JPRS 24523

High-Temperature Ultrasonic Heating and Its Use in the Study of Metals and Alloys, by Yu. F. Balakayev, S. Z. Bokshtein. RUSSIAN, per, <u>Pizika Metallov i Metallovedenic</u>, Vol XVI, No o, 1963, pp 872-876. HB 6210

The Effect of the Carbon Content of the Diffusion of Hydrogen I n Carbon Steels, by G. I. Batalin, A. L. Balyasnyy, 8 pp. RUSSIAN, per, 1z Vygsal Ucheb Zaved, Chern Steel See 3, 1061 on 120-125.

J17KB 440co

Effect of Lubular Electrodes on the Thermal Working of the Steelmaking Arc Furnace, by N. V. Okorov, L. E. Nikol'skiy, et al. RUSSIAN, per, 12 Yysshikh Ucheb Zayed Chern Met, No 9, 1962, pp 105-110.

Kinetics of the Reduction of Iron Oxides by Mixtures of Carbon Monoxide and Hydrogen, by 1. P. Kurzina, S. I. Filippov

RUSSIAN, per, Iz. Yysankh Ucheb Zaved, Chern Met, No 9, 1963, pp 5-10, 118 6104

Determination of the Deoxidizing Power of Elements by the EMF Method, by V. P. Luzgin, A. F. Vishkarev, et al.

RUSSIAN, per, 1z Vysshikh Ucheb Zaved Chern Mer, No 9, 1963, pp 50-54. HR 6098

Some Problems of the Interaction of the Components of the FE-Ni-O System in Hard Phases, by D. I. Lisovskiy, A. Yu. Malovskiy, RUSSIAN, per, <u>1z Vysshikh Ucheb Zaved, I svetnaya Metallergiya</u>, Ne e, ¹⁹02, pp 50-56.

Scientific Materials & Metallurgy (Contd)

Effect of Oxygen-Free Heating on the Surface State of Steel, by V. P. Nikiforov, V. A. Kuroedov. RUSSIAN, per, Kuznechno-Shtampoyochnoe Proizvodavo, No 6, 1963, pp 31-33.
BISI 3609

New Furnaces for Non-Scale Heating of Steel and Results of Experiments on Them, by M. M. Efros. RUSSIAN, per, <u>Kuznechno-Shtampoyochnoye Protzyodstyo</u>, Vol Y, No 8, 1963, pp 33-37.

*BISI 3683

Non-Scale Heating of Metals, Before Stamping, in a Semi-Continuous Pusher Furnace, by V. N. Kostyakov, A. E. Erinov.
RUSSIAN, per, <u>Kuznechno-Shtampovochnoye Protzvodstvo</u>, Vol. V, No. 11, 1963, pp. 32-36.
*BISI 3684

Action of a Pulsating Gas Stream on Liquid Metal, by A. A. Alov, V. M. Shmakov. RUSSIAN, per, <u>Liteynoye Proizvodstvo</u>, No 1, 1964, pp 16, 17.

Special Methods for the Nondestructive Testing of Materials, Part II, by F. II. Rodewald, C. Studer, RUSSIAN, per, Metal, Vol XVII, No. 1, 1965, pp 24-26, IIB 5857

Magnetometric Study of Electric Tempering of Steel, by V. N. Gridney, V. G. Permyakov, et al. RUSSIAN, per, <u>Metal I Obra Metallov</u>, No 4, 1958, pp 9-1c. His 4182

Effect of Ultrasonic Vibrations on the Mechanical Properties of 18-4-1, R18, High-Speed Steel, by K. M. Pogodina-Alekseyeva, V. S. Birent, et al. RUSSIAN, per, Metal I. Term Obra Metallov, No. 1, 1964, pp. 40-44.

Poront/Ing of Iron and Steel in Vacuum, by G. V. Zennskov, E. G. Faidash, et al. RUSSIAN, per, <u>Metal i Term Obra Met</u>, No 3, 1964, pp 61-63. iii 6220

On the Problem of Sintering that the searce by

RUSSIAN, per, <u>Poroshkovaya Metatlurgiya</u>, Yol I, No I, 1961, pp 82-91. III: 5995

Effect of Certain Elquid-Phase Components on the Rate of Dissolution of Silver and LD IN Cyanide Solutions, by M. Ivanovskiy. RUSSIAN, per, Shornik Nauch Trudov, No 31, 1958, pp 281-297. CSIRO/No 6576

Analysis of Aluminum Metal for Aluminum Oxide Content, by A. A. Fedorov, F. B. Linkova, RUSSIAN, per, <u>Swornik Trudoy TsNIIChM</u>, Vol XXIV, 1902, pp 172-178, H3 0202

Hardenability of Brand Shkhl⁵, 9KhS and KhVG Sreels, by V. M. Doronn, I. G. Ivanov, et al, 17 pp. RUSSIAN, per, <u>Standartizatsiya</u>, No.1, 1964, pp.17-23. JPRS 24520

Kinetics of Austeinte Grain Growth in Electrosiag Welding, oy C. V. Nazarov, 9 pp. RUSSIAN, per, <u>Sydroch Proiz</u>, No 12, 1963, pp 10-12. JPRS 24278

New Dyes for Dyeing and Printing Pure Silk Fabrics, by K. Sidneva, et al. RUSSIAN, per, <u>Tekstil Prom</u>, Vol XXII, No II, 1962, pp 60-64. CSIRO/No 6586

Accumulation and Treatment of Damage to Pearlitic Steels During Performance, by P. A. Antikain. RUSSIAN, per, Toploenergetika, Vol IX, No 11, 1962, pp 59-62. CEGB 3023

Invostigations of the Influence of the Chemical Composition of Austenlite Steel and of Inhibitors on Corrosion Cracking, by V. N. Gulyayev, E. S. Gromova.
RUSSIAN, per, Teploenergetika, Vol X, No 5, 1963, pp 75-79.
CEGB 3218

Small-Scale Tectonic Features of Coal Scalms and Spontaneous Blowouts, by V. V. Ez. RUSSIAN, per, Trudy Geoffz Inst, Ak Nauk SSSR, No 34(161), 1956, pp 5-73. Dept of Interior TN7 E57 No 720

Some Properties of Ceramic Spray Coatings, by K. S. Shlyakova, RUSSIAN, per, Trudy Instituta Metallurgii Imeni A. A. Baikova, Vol XII, 1963, pp 118-120. IIB 6163

Method of Investigating Glass-Crystal Structure, by M. A. Bezborodov, A. M. Kripskiy, 21 pp. RUSSIAN, per, <u>Trudy Inst Nauchnyye Belorusskogo PolitekIntcheskogo</u>, No 82, 1960, pp 3-15. 9692313 FTD-TT-63-796

Determination of Aluminum Oxide in Metallic Aluminum, by E. I. Denisov. RUSSIAN, per, Trudy Leningrad Politekh Instituta, No 201, 1959, pp 102-109.

Infra-red Absorption Spectra of Clay Minerals, by O. Setkina, N. Gopshieln. RUSSIAN, per, Trudy Leningrad Tekhnol Inst imeni Lensoveta, Vol XXXVII, 1957, pp 78-90. CSIRUNO 0207

Intra-Red Spectra of Argillaceous Minerals and Their Uses, by O. Setkina, RUSSIAN, per, <u>Trudy Leningrad Tekhnol Inst imeni Lensoveta</u>, Vol. XI., 1957, pp. 155-162.

Experimental Determination of Cement Pressure on the Walls of a Reinforced Concrete Silo, by B. A. Petrov. RUSSIAN, per, <u>Tsement</u>, Vol XXIV, No 2, 1958, pp 21-25. GB/114/190/HC/59 Anon

Brazing Sap-2 Sintered Aluminum Powder, by V. L. Grishin, 7 pp. RUSSIAN, per, <u>Isvetnyye Metally</u>, No 1, 1904, pp 58-62. JPRS 24355

Investigation of Semiconductor Compounds, by D. N. Nasledov. RUSSIAN, per, <u>Vest Ak Nauk SSSR</u>, No 1, 1964, pp 100–102. SIC

Scientific Materials & Metallurgy (Contd)

Creep Analysis of Orthotropic Fiberglass - Reinforced Plastics, by M. A. Koltunov, V. N. Bezukhov, RUSSIAN, per, <u>Vest Moskov Univ</u>, <u>Ser Mate i Mekh</u>, No 6, 1963, pp 64-70.

A Reduction in the Contamination of Electric Stock by Haltline Cracks and Non-Metallic Inclusions, by K. K. Prokhorenko, N. Ya. labchuk. RUSSIAN, per, Yoprosy Proiz Stall, Ak Nauk Ukrainsky SSR, Otdel Tekh Nauk, No 8, 1961, pp 55-69.
BISI 3041

Spectrographic Determination of Silicon, Manganese and Phosphorus in Gray Iron, by V. I. Matavina. RUSSIAN, per, <u>Zavod Lab.</u> Vol XXIX, No 112, 1963, pp 1451, 1452.

The Spectrographic Determination of Milton in Pig Iron, by V. T. Lyakishev, G. P. Platonova, et al. RUSSIAN, per, Zayod Lab, Vol XXIX, No 12, 1963, p 1452.

Investigating the Conditions for Obtaining High-Purity Aluminum by Zone Recrystallization, by V. N. Vigdorovich, V. V. Krapukhin, et al, 13 pp. RUSSIAN, per, Zavod Lab, No 1, 1904, pp 47-54. JPRS 24459

Inexpensive Cast Iron and Steel, 6 pp. RUSSIAN, np. Zarya Vostoka, 5 Mai 1964, p 2. JPRS 24518

The Simultaneous Extraction of Six Valance Uranium in Benzene Schulons of 8-Hydroxyl Quinoline and Tributyl Phosphate, by Wu Kung-pao, 5 pp.
GHINESE, per, Klo-hsuch Tlung-pao, No 12, 1963, pp 45, 46.
JPRS 24350

Prefinitionary Research on the Supply of Magnestum in Major Soffs of Laterfife Zones, and the Effectiveness of Magnestum in Fertilizers, by fistel Chien-chieng, Chien Chi-hsing, et al. CHINESE, per, K'o-hsuch Photo-real Major 2

JPRS 23893

Corrosion of Stainless Steel and Llectrical Potential, by Hua Pao-ting, Shen Hsing-su, et al. CHINESE, per, K'o-hsuch T'ung-pao, No 12, 1963, pp 56, 57, 58. JPRS 23893

Enriched Tantalum Calcite, by T¹ung Wu, Chang Ching, 7 pp. CHINESE, per, <u>K¹0-h</u>such T¹ung-pao, No 1, 1964, pp 71-73. JPRS 243-22

Crystalline Structure of Ascharite, by Pleng Chilischung, Wu Chleng-yu, et al, 6 pp. CHINESE, per, Kloshsuch Tlung-pao, No 1, 1904, pp 73-75.

JPRS 24350

Active Materials Which can Produce Optical Maser Action, by Liu Stong-hao, 34 pp. CHINESE, per, Kionsuch Pung-pao, No 2, 17 Feb 1964, pp 127-139.

JPRS 24552

General Description of Geophysical Prospecting, by Ku Kung-hsu, 5 pp. CHINI SE, per, T-ch'iu Wu-li K'an-t'an, No 2, 22 Mar 1958, pp 43, 44. JPRS 2408

.-

The Widespread Application of Geophysical Prospecting Methods in Investigating the Distribution of Rare Metals, by Hsia Kuo-chih, 8 pp. CHINESE, per, Ti-ch'iu Wu-li K'an-t'an, No 6, 22 Nov 1958, pp 3-8, JPRS 24087

Contribution to the Technology of Single Crystal Growing, by J. Eckstein, P. Grobner. CZECH, monograph, Konference o Monokrystalech, Prague, No 3, 1960, pp 109-123. SIC Ltd

Growth of Piezoelectric Single Crystals in the USSR, by L. Z. Ruzakov, G. N. Stoykov. CZECH, monograph, Konference o Monokrystalech, Prague, No 3, 1960, pp 254-261. SIC Ltd

Potentiostat in Metallography, by Vladmir Cibal, Milan Prazak, 17 pp. CZECH, per, llutnicke Listy, Vol XIII, No 6, 1958, pp 496-501. 96923II FTD-17-64-19

The Effect of Sulphur Content on the Quality of Scamican Tubes, by J. Duda. CZECH, per, <u>Hutnicke Listy</u>, Vol XVII, No 6, 1962, pp 390-395. BISI 3622

The Determination of the Lengths of the Thick Ends of Reduced Fubes, by D. Valenta, CZECH, per, Humteke Listy, Vol XVIII, No 6, 1963, pp 404-406.
BISI 3607

Measurement of the Temperature Distribution and Its Effect on the Bath Circulation in a Model of an Oxygen Lance Converter, by Ludek Kodrle, CZECH, per, <u>Hutnicke Listy</u>, No 2, 1964, pp 89-93, SIC

Defects in Thick Plates Detected by Means of Ultrasonies. Their Interpretation and Method of Removal, by Miroslav Sicha. CZECH, per, <u>Hutnicke Listy</u>, No 2, 1964, pp 108-117.

On Whether Experimental Oxygen Converters Should

GZECH, per, <u>Hutnicke Listy</u>, So 2, 1964, pp 123-126, SIC

Electrolytic Isolation of Phases in the Alloys: Fe-Ni-Cr-Ti-Al-W(Mo); Ni-Cr-Co-Ti-Al; Ni-Cr-Co-Ti-Al-Mo(W), by Jiri Pokorny. CZECH, per, <u>Hunticke Listy</u>, No 2, 1964, pp 130-133. SIC

Gleaning Steel by Scarfing, by J. Kosikuba, CZEGH, per, Hunnik, Vol XII, No 7, 1962, pp 339-347.
*BISI 3742

Mechamization of the Production of Medium Ingot Shoulds, by A. Valusek. CZECH, per, Hutnik, Vol XIII, No 7, 1963, pp 320-324. *BISI 3087

On the Embrittlement of Steel, by V. Koselev, St. Burda. CZECH, per, <u>Hutnik</u>, Vol XIII, No 11, 1963, pp 544-547; No 12, pp 587-589. HB ofo2

Scientific Materials & Metallurgy (Contd)

A Method of Non-Destructive Measurement of Carburised Case Thickness, by L. Duben. CZECH, per, <u>Materialovy Shornik</u>, No 1, 1961, pp 61-72. BISI 3548

Tubular and Cylindrical UO2-Stainless Steel Fuel Elements Manufacture and Properties, by L. Micny, M. Champigny, et al, 47 pp. FRENCH, rpt, 12 Mar 1963. 9220789 AEC-Tr-6323 3、本地震動艦

F.1 TY Steel for Superheater Tubes. FRENCH, rpt, <u>Centre National de Recherches</u> Metallurgiques, No 10, 1963. BISI 3313

F 2 R8 Steel for Superheater Tubes, by M. Caubo, L. Jacques-Houssa, FRENCH, rpt, <u>Centre National de Recherches</u> <u>Metallargiques</u>, No 10, 1903. BISI 3514

Recovery, Conditioning and Cleaning of Gases From LDP Vessels, by P. Debruille, FRENCH, rpt, International Congress on Oxigen Steel Plants, 23-20 Sept 1903. CRL/T 1426

Continuous Determination of the Carbon Content of the Bath in Processes of Refining With Pure Oxygen, by J. Dumonte-Fillon, et al.
FRENCH, rpt, International Congress on Oxygen Steel Plants, 23-26 Sept 1963.
CRL/T 1360

On the Behaviour of Oxygen in the LD Converter, by J. E. de Graaf. FRENCH, rpt, International Congress on Oxygen Steel Plants, 23-20 Sept 1903. CRL/1 1357

Survey of Foams in Basic Phosphate Slags, by P. Kozakevitch, G. Urbain. FRENCH, 1pt, Paper Presented at the International Meeting on Oxygen Steelmaking at Le Touquet, Sep 1903. *BISI 3740

Emal Report of the Accident That Happened During

June 26, 1962, and the Radiochemistry Building of the Center. FRENCH, 1pt, Report of the Services de Chimie du Plutonium, 26 Jul 1963, 12 pp. *AEC

Protection of the Mechanical Properties of Wool by the Use of Formaldehyde in Dyelng Operations at High Temperatures, by P. Ponchel, et al. FRENCH, per, <u>Bulletin Plansitial Textile de France</u>, No 103, 1962, pp. 1155-1171. CSIRO/No 6563

Deformation of Uranium During Irradiation at Low Temperature, by Yves Quere, Jacques Doulat, FRENCH, per, <u>Comptes Rendus des Scances de</u> 1/<u>Academie des Sciences</u>, <u>Vol GGLH</u>, 27 Feb 1961, pp 1305-1307.

Localization of Isomorphic Replacements in Muscovite, by L. Gatineau. FRENCH, per, <u>Compres Rendus</u>, <u>Academic des Sciences</u>, Vol CCLVI, 1965, pp 4648, 4649. CSIRONO 6697

Propagation, Fabrication and Metallargical Properties of Composite Materials of the Mg, MgO Type, by J. Herenguel, 10 pp. FRENCH, per, Journal of Nuclear Materials, Vol. VIII, No. 1, 1963, pp. 49-50. 9220582 AERE-Harwell-Tr-976

Scientific Materials & Metallurgy (Contd)

Study on Uranium Nitrides, on Plutonium and Their Solid Solutions, by P. Anselin. PRENCH, per, <u>Journal of Nuclear Materials</u>, Vol X, No 4, 1963.

The Tempering of Quenched High Speed Steels, Part II, by J. Papier, G. Pompey. FRENCH, per, Memoires Scientifiques de la Revue de Metallurgie, Vol LVII, No 12, 1960, pp 949-971.

BISI 3501

Experimental Study of Austenite Pormation in High-Nickel Steels, by P. Legendre, X. Wache, FRENCH, per, Los Memoires Scientifique de la Revue de Metallurgie, Vol LXI, No 1, 1964, pp 33-42.
*BISI 3728

Direct Analysis of Gas and Other Metalloids Steels by Emission Spectrometry in the Remote Ultra Violet Range, by R. Berneron, J. Romand. FRENCH, per, Memoires Scientifiques Revue Metallurgie, Vol I.XI, No 3, 1964, pp 209-220.

Progress Made in Handling Equipment in Medium Sized and Large Forces, by A. Mercier. FRENCH, per, <u>La Metallurgie et la Construction Mecanique</u>, Vol XCIV, No 12, 1962, pp 1109-1123. BISI 3555

Nitrogen in Cast Irons, by N. Vollanik, FRENCH, per, Revue de Metallurgie, Vel LVIII, No 9, 1961, pp 779-787. BISI 3626

Potentiokinetic Study of Iron and Steel Passivity With Simultaneous Microscopical Observation, by M. Froment, FRENCH, per, Revue de Metallurgie, Vol LIX, No 3, 1962, pp 225-232. CEGB 2894

Reduction of an Iron Oxide Bed With a Gas, Part I, by A. Rist, G. Bomivard, FRENCH, per, <u>Reyne de Metallurgie</u>, Vol LX, No 1, 1963, pp 23-27. *BISI 3679

of 18/8 Type Steels, by A. Mercier, J. Hochmann, FRENCH, per, <u>Revue de Metallurgle</u>, Vol LX, No 5, 1963, pp 477-485. BIGI 3629

Quality Control in an Iron and Steel Works, by P. Matnicu, B. Seruzier. FRENCH, per, Revue de Metallurgie, Vol LX, No 9, 1963, pp 763-773. **HISI 3662

On the Deoxidation and Desulfurization of Liquid Steel by Means of Lithium, by C. E. Beaulieu, A. Chaillou, or at.

FRENCH, per, <u>Revue de Metallurgie</u>, Vol LX, No 10, 1963, pp 845-849. HB 6113

Discussion of Anisotropy of Values for Strength of Steel as Function of Plastic Deformation Conditions, by R. Zoja, M. Ferrero, FRENCH, per, <u>Revue de Metallurgie</u>, Vol LX, No 10, 1963, pp 863-868.
*BISI 3714

Organization of a Quality Control Service in a Steelworks Integrated for Flat Products, by G. Montahue, E. Infona, FRENCH, per, <u>Revue Metallicial</u>, No. 10, 1963, pp. 889-804, FBIST 3-500 The Future of the Iron and Steel Industry, by H. Malcor. FRENCH, per, <u>Revue Universelle des Mines</u>, Vol XIX, No 6, 1963, pp 226-237. HB 5076

Process for the Manufacture of Nuclear Fuel Materials and Products, and the Materials and Products Obtained by Means of This Process, by P. Galmiche, A. Hivert, 19 pp. FRENCH, Patent No 1,198,870, 14 Feb 1958. 9220557 AEC-NP-Tr-1097

Process for Preparing an Iron-Aluminium Alloy, by Gerard Cabane, Pierre Monturat, et al, 9 pp. FRENCH, Patent No, 1,323,724. 9221940 AEC-NP-Tr-1123

The Time Law of the Precipitation of New Phases in Solid Solutions, by B. Hischner, GERMAN, per, <u>Archiv fuer Eisenhuttenwesen</u>, Vol XXVI, No 1, 1955, pp 59-62 BISI 3611

Ultrasonic Inspection of Steel Sheet and Plate With Lamb Waves. Part II, by P. Holler, E. Lechkey. GERMAN, per, <u>Archiv Elsenhuitenwesen</u>, Vol XXXIII, No 10, 1962, pp 704-710. 113 5872

Further Developments in the Residue Analysis or Iron-Carbon Alloys, by W. D. Gras, A. Wittmoser. GERMAN, per, <u>Archly fuer Elsenbuttenwesen</u>, Vol XXXIV, No 8, 1963, pp 571-781. BIST 3505

Transformation Behaviour and Grain Growth of Vacuum Treated Unalloyed Heat Treatable Steels, by A. Rose, A. Wicher, GERMAN, per, Archiv fuer Eisenhuttenwesen, Vol XXXI

GERMAN, per, Archiv (uer Eisenhuttenwesen, Vol XXXIV, No 8, 1963, pp 617-621). BISI 3435

Sources of Error in the Determination of the Oxygen Contents of Aluminium KHIed Steel Specimens, by T. Kraus. GERMAN, per, <u>Archiv Iner Elsenhuitenwesen</u>, Vol XXXV, No 1, 1964, pp 39-44, *BISI 3677

Investigations Into Recrystallization in Non-Alloy Mild

NITIDE, by II. DOLVAY J. GERMAN, DOLVAY J. S. BISCHHUITENWESEN, VOLXXXV, No. 1, 1964, pp. 57-64.
*BISI 3070

Comparison of Various Methods to Determine the Hydrogen Content of Liquid Steel, by H. Zitter, W. Schwarz. GERMAN, per, <u>Archiv fuer Eisenhuttenwesen</u>, Vol XXXV, No 2, 1964, pp. 109-114. *DIST 3678

Investigations on the Precipitation of Garbon From Alpha Iron With Low Carbon Content, by W. Wepner, et al. GERMAN, per, <u>Archiv fuer Eisenhuttenwesen</u>, Vol XXXV, No 2, 1964, pp 141-151. *BISI 3729

Considerations on the Influence of the Vibration Data Upon the Servening Operation, by F. Stoff, GERMAN, per, <u>Authoreitumestechnik</u>, No. 11, 1963, pp. 462–466.
*BIST 3715

An Extensive Study of Reduction of from Oxides, by L. von Bogdandy, et al. GERMAN, pet, Berichte der Bunsengesellschaft für Physik Giem, Vol LXVII, No 9, 1964, pp 956-964.

*BISI 3735

. Tr. ..

The Thermal Decomposition of Hard Coals as a Function of Particle Size. II - A Contribution to the Theory of Heating and Degasification, by H. Luther, S. Trausral.

GERMAN, per, Brennstoff-Chemie, Vol XLIV, No 3, 1963, pp 65-67.

NCB A,2301/JG

Softening Behaviour of Coals of Various Rank, by G. Juranek. GERMAN, per, Brennstoff-Chemie, Vol XLIV, No 4, 1963, pp 97-104.
*BISI 3694

On Coke Reactivity, by K. H. Kotch, W. Peters, GERMAN, per, <u>Brennstoff-Chemie</u>, Vol XLIV, No 12, 1963, pp 364-368.
**BISI 3710

Corrosion Problems of Cables Under Lead. Potential Displacement and Intercrystalline Corrosion of Lead. GERMAN, per, Bulletin Technique PTT, No. 9, 1302.

Pozzolano Metallurgical Cements, by M. Gullaume. GRRMAN, per, <u>Chemische Industrie</u>, No 11, 1962, pp 487-789. CEGB 3247

Steg-Email: Decarburized Sheet for One-Coat Enamelling, GERMAN, per, Continentaler Etsenhandel, No II, 1903, pp 41-44. ISS 3033

Characteristics of Hardness Determinations Using Different Indentors and Applied Loads, by W, Schmidt. GERMAN, per, <u>Dew-Teyindsche Berichte</u>, Vol III, 1963, pp 136-149.

Comparison of Long Time Behaviour of Staintess and High Temperature Steels Above 500°C, by R. Oppenheim, G. Lennartz. GERMAN, per, <u>Dew-Technische Berfehte</u>, Vol IV, No 1, 1964, pp f-8.
*HISI 3686

Protection of Metal-Recuperators Against Overheating,

GERMAN, per, <u>Gaswariae</u>, vol. v., 80 v., 1750, pp.8-13. BISI 3503

Hard Metallic Spots as a Special Form of Inclusions in Nonterrous Cast Alloys, by H. Eisenreich. GERMAN, per, Giesserel, Vol XLIX, No 7, 1902, pp 153-156. HB 0185

Determination of Heat Retention of Textiles, by H. Klauer, F. Schmieder, GERMAN, per, <u>Melliand TextuberIchie</u>, Vol XLIV, No.1, 1963, pp. 33-36. CSBROVA 0513

Present State of German and International Standards in the Field of Yarn and Fabric Testing, by E. Wagner, GERMAN, per, <u>Melliand Textilberichte</u>, Vol XLIV, No 2, 1963, pp II3-II7. CSIRO/No 6514

What Causes the Difference in the Sensation of Warmth Given by Garments Made of Natural and of Synthetic Fibres 7, by K. Prett. GERMAN, per, Melhand Textilberichte, Vol XIIV, No. 2, 1963, pp 141, 142. CSIRO No. 6516

Polar Coordinates Analysis of Cup Formation, IA W.Schol . GERMAN, per , <u>Metall</u>, Vol. XVI, No. 4, 1902, ep. 51 = C.2, GERCON, 00524

Scientific Materials & Metallurgy (Contd)

into a particle of

Occurrence of Plate-Shaped Segregation Zones in Metal Alloys, by U. Heubner. GERMAN, per, Metall. Vol XVI, No 5, 1962, pp 403-407.
*BISI 3698

A Contribution to the Drawing of Cold Pilgered Seamless Steel Tubes Without Mandrel, by J. Uvira. GERMAN, per, Neue Huette, Vol VIII, No 2, 1903, pp 84-86. BISI 3656

New Lubricants for Tube Drawing, With Special Regard to Austentic Steels, by Z. Halas, GERMAN, per, <u>Neue Huette</u>, Vol VIII, No 2, 1963, pp 86-91. BISI 3657

Influence of Deoxidation on Surface Defects in Medium Hard Basic Beasemer Steels, by E. Zimmermann. GERMAN, per, <u>Radex Rundschau</u>, No 6, Dec 1963, pp 635-646. BISI 3572

Formation, Origin and Physical Control of the Structure of Cast Metals, by O. Schaaber. GERMAN, per, <u>Radex Rundschau</u>, No 2, 1964, pp 20-41. *BISI 3738

Determination of Tantalum in Steel and Ferro Alloys by Activation Analysis, by II, Marchart, F. Hecht. GERMAN, per, <u>Radex Rundschau</u>, No 2, 1964, pp 55-70.

Metallurgical Considerations on the Present State of Development of Tool Steels, by H. Briefs.
GERMAN, per, <u>Schweizer Archiv</u>, Vol XXIX, No 12, 1963, pp 413-427.
*BISI 3689

User Traffs - The Ultimate Test Method, by J. Wiesdorfer, GERMAN, per, Spinner Weber Textifveredling, Vol VI, pp 514, 515.

CSIRO No 6500

Determination of Coke Consumption in the Blast

pp 917-921, 1081 3627

Lechnical Delo, mation Characteristics of Bot Rolling Mills, by O. Pawelski. GERMAN, per, <u>Staid and Ersen</u>, Vol LXXXIII, 1963, pp 1440-1451. BISI 3620

The Influence of Temperatures Arising in single and Multiple Wire-Drawing Machines on the Mechanical Properties of the Wire, by G. Elsenbulh, GERMAN, per, Stahl und Eisen, Vol EXXXIII, 1963, pp. 1459-1466.
BISI 3625

The Chemical Analysis of Steel, by K. H. Gunther, GERMAN, per, <u>Stabl and Eisen</u>, Vol LXXXIII, No 23, 19e3, pp 1513–1518. HB 5833

Comribution to the Solution of the Problem of Off-Lengths With Rolled Semi-Funshed Products, by K. H. Mommertz. GI-RMAN, per, Stahl und Fisen, Vol 1 NNXIII, 1963, pp 1561-1563. BISI 33-34

On the Thermodynamic Interactions Between Phosphorus and Oxygen in Liquid Iron, by E. Steinmetz. GERMAN, per, Stahl und Eisen, Vol LXXXIV, No I, 1964, pp 168-169.
*BISI 3672

Process for Removal of Cyanide From Top Gas Washing Water With the Use of Polyphosphates, by G. von der Dunk, 11. Dembeck. GERMAN, per, <u>Stahl und Elsen</u>, Vol LXXXIV, No. 2, 1964, pp 259-264.

Remarks on the Desulphurisation of Oxygen Top Blowing Processes, by M. Krainer. GERMAN, per, <u>Technische Mitteilungen Krupp</u>, Vol XXI, No 2, 1963, pp 37-43. BISI 3593

of High Phosphorus Pig Iron, by M. Walitater. GERMAN, per, <u>Technische Mitteilungen Krupp</u>, Vol XXI, No 2, 1963, pp 44-56.

Flow Under the Area of Impingement of an Unrestrained Gas Jet Striking the Surface of a Liquid at Right Angles, by J. Maatsch. GERMAN, per, <u>Technische Mittellungen Krupp</u>, Vol XXI, No 5, 1903, pp 1-4. *BISL 3696

Progress in the Automation of Splinning, by F. Walx. GERMAN, per, <u>Textil Praxts</u>, No 4, 1903, pp 314-325, GB/H2/Tr 405

Evaluation of the Gas-Permeability of Firebricks: avanuation of the Cass-Permeability of Firebricks and Their Importance in Steelworks Practice, by P. Artelt, B. Oberfeuer.
GERMAN, per, <u>Ionfudustric Zeitung und Keramische Rundschau</u>, Vol X, 1963, pp 205-209.
1981-3572

Double-Laver Build-Up on Iron and Lead Electrodes in the Ground, by T. Markovic, P. Klikov.

сесь 2860

The Effect of Soil Moisture on the Rate of Corrosion of Iron and Lead in the Soil, by T. Markovic. GERMAN, per, Werkstoffe und Korrosion, Vol V, No 7, 1954, pp. 244-246.

The Corrosion Systems of Metals in Soft, III Copper and Copper Alloys, by T. Markovic. GERMAN, per, Werkstoffe and Korrosion, Vol XI, No 2, 1900, pp 87-93. CEGB 2900

The Stress Corrosion Cracking of Iron Alloys With Special Reference to Stainless Austenitic Steels, GERMAN, per, Werkstoffe und Kortosion, Vol XIV, No. 9, 1963, pp. 729-739, BISI 3541

Quantum Spectrochemical Detection of Major Elements in Flue Dust and Iron Ores to the Direct Current GERMAN, per, Z fuer analytische Chemie, Vol CLXXX, No e, 1961, pp 401-41 v. CEGR 2005

Scientific . . Materials & Metallurgy (Contd)

The Dissociation of a Metal Oxide, by Fritz Born. GERMAN, per, Z fuer Blektrochemie und Angewandte Physikalische Chemie, Vol XXXI, 1923, pp 309-311. Dept of Interior TN7 E57 No 732

The Hardening of Iron-Zinc and Cobalt-Zinc Alloys, ine riardening of iron-zinc and Gobait-Zinc Alloys, by J. Schramm, A. Mohrnheim. GERMAN, per, Z fuer Metallkunde, Vol XXXIX, No 3, 1948, pp 71-78. BISI 3614

Data on the Speed of Sound in Pure Metals, by K. H. Schramm. GERMAN, per, Z. fur Metallkunde, Vol LIII, No 11, 1962, pp 729-735. BISI 3492

Changes in X-Ray Interference Hystoresis and Surface Structure Under Single and Alternating Stresses in Brass, Nickel and Steel, by R. J. Hartmann, E. Macherauch. GERMAN, per, Z fuer Metallkunde, Vol LIV, No 4, 1963, pp 197-206. CEGB 3169

Disturbing Flow Phenomena During the Deep Drawing of Cold Rolled, Americal 17% Chromium Steel Strip, by H. G. Appel, H. Becker. GERMAN, per, Z fuer Metallkunde, Vol LIV, No 12, 1963, pp 724-728.

Reduction of Thermopower to Ideal Purity of Metals, by Max Kohlet. GERMAN, per, <u>Z tuer Physik</u>, Vol CXXVI, 1949, pp 481–494. *Navy/NRL

Corrusion Observer, 59 pp. HUNGARIAN, per, <u>Korrozios Figyelo</u>, Vol III, No 4-5, 1963, pp 65-100. 9692306 F J D=T T=63-1069

Effect of Small Cavities Upon the Velocity of Sound in Metals, by F. Gatto. HALIAN, per, Alluminio, Vol XIX, No 1, 1950, nn 19⊶2o. HB 6133

Vol XII, 1981, pp 274-289. CEGB 2913

Pozzolanie Cements, Part II, by A. Rio. FfALIAN, per, <u>Amail di Chimia Applicata</u>, Vol XI.II, 1952, pp 520-534. CEGB 2911

External Defects Typical of Seamless Tubes From Mannesmann-Type Piercing Milts With Oblique Double-Conical Rolls, by M. Mazzanti, et al. HALIAN, per, <u>Metallurgia Italiana</u>, Vol LIV, No 11, 1962, pp 485-496, HB 5010

The Term Company's New Light Section Mill, by R. Natini, M. Esposito. HALIAN, per, <u>La Metallurgia Italiana, Atti Notizoe,</u> Vol LV, No 9, 1963, pp. 251-263, BISI 3568

Hinac Coated Steel Sheet, by H. Takano, K. Toki. JAPANESE, rpt, Nippon Kofign, No 9, 1962, pp 209-221, *BISI 3681

The Use of Oxygen in the Open Hearth Shops of the Yawata Iron and Steel Works, by T. Kinoshita, JAPANESE, bk. <u>Seltetsu Kenkyu</u>, No 230, Mar 1960, pp 2841-2862. BISI 3325

Five Papers on LD High Carbon Steel Production, JAPANESE, rpt, 60th Grand Lecture Meeting of the Iron and Steel Institute of Japan, *BISI 3669

Twisting and Warping of Wood, by S. Ohkura, K. Ozawa, et al. JAPANESE, per, Journal of the Japan Wood Research Society, Vol VII, No 5, 1961, pp 205-207. NZDIA

Study of Water-Soluble Wood Preservatives. Potentiometric Titration in Aqueous Solutions of Chemicals, by T. Shibamoto, Y. Inoue. JAPANESE, per, Journal of the Japan Wood Research Society, Vol VIII, No 5, 1962, pp 204-207.

New Method of Observing Austenite Grains and Grain-Growth Inhibitors of Al-Killed Steel, Part I, by K. Endo, T. Otake. JAPANESE, per, Nippon Kinzoku Gakkat-Si, Vol XIX, No 2, 1955, pp 51-54, BISI 3460

New Method of Observing Austentic Grains and Grain-Growth Inhibitors of Al-Killed Steel, Part II, by K. Endo, T. Otake, JAPANESE, per, Nippon Kluzoku Gakkat-Si, Vol XIX, No 6, 1955, pp 389-392,

New Method of Observing Austenite Grains and Grain-Growth Inhibitors of Al-Killed Steel, Part III, by K. Endo, T. Otake. JAPANESE, per, Nippon Kluzoku Gakkat-Si, Vol XIX, No 6, 1955, pp 393-395, BISI 3400

Study on 5% Cr-1/2% Mo, 7% Cr-1/2% Mo, and 9% Cr - 1% Mo Steels for Steel Tubes, by 11. Hirano, S. Yamamoto. JAPANESE, per, Tetsu to Hagane, Vol XLVI, No 3.

Improved Open-hearth Refractories and Their Consumption When Injecting Oxygen, by K. Misawa, T. Yamaguchi, JAPANESE, per, <u>Tetsu to Hagane</u>, Vol XLVIII, No 11, 1962, pp 1322-1324.

Study of the Intergranular Corrosion of Low-Carbon Austendite Stainless Steel, by K. Takahashi, et al. JAPANESE, per, Tetsu to Hagane, Vol XLIX, No 10, 1963, pp 1549-1551.

Addition of Rare Earth-Calcium-Silicon Alloys to Heat-Resistant Steels and Alloys, by M. Hasegawa, M. Saano, et al. JAPANESE, per, Tetsu to Hagane, Vol XLIX, No 10, 1963, pp 1553-1555.

Photometric Determination of Carbon in Steel, by K. Mukaewaki, K. Nishukiori, et al. JAPANESE, per, Tetsu to Hagane, Vol XLIX, No 10, 1963, pp 1598-1600. HB 6191

Scientific Materials & Metallurgy (Contd)

Spectrographic Determination of Niobium in Steel, With a Spark Discharge in an Argon Atmosphere, by T. Kawaguchi, Y. Kudo, et al.
JAPANESB, per, Tetau to Hagane, Vol XLIX, No 10, 1963, pp 1004-1605.
HB 6192

Effect of Niobium on Steel, by K. Narita, A. Miyamoto. JAPANESE, per, Tetsu to Hagane, No 2, 1964, pp 174-182. *BISI 3726

The Effect of the Content and Nature of Mineral Substance of Coal on the Value of Sapozhnikov's Plastometric Parameters, by R. Karkosz, 7 pp. POLISH, per, Biuletyn Glownego Instytutu Cornictwa, No 2, 1958, pp 21-24.
OTS 61-11350 PL-480

Popularization of the Use of Fly Ash, by J. Dziedziuk, POLISH, per, Drogownictwo, No 8, 1961, pp 193-195. CEGB 3010

Chilled and Semi-Chilled Cast Iron Rolls, by S. Maj, Z. Wusatowski, POLISII, per, Huntk, Vol XIV, No 11, 1947, pp 519-534. BISI 3527

Investigation of the Mechanism of Phenomena Occurring in the Plastic State of Bituminous Coal Treated by Solvent Extraction, by S. Heilpern, 6 pp. POLISH, per, Koks-Smola-Gas, No 1, 1957, pp 8-11. Отз 61-из50 PL-480

Experiments With Low-Temperature Carbonization Process (Part 1), by J. Kowalski, H pp. POLISH, per, <u>Koks, Smola, Gaz</u>, No 1, 1957, pp 12-10. 9221978 OTS 61-31319 PL-480

Attempts to Obtain Metallurgical Coke Formed on A Semindustrial Scale, by N. R. Kushnerevich, 14 pp.

pp 277-277, 9221978 O1S 61-31319 PL~480

Experiments on the Extraction of Creosore Oil From Brown Coal Low-Temperture Tar, by J. Kowalski, J. Szczurek, 6 pp. POLISH, per, Koks-Smola-Gaz, No 2, 1958, pp 47-50. OTS 61-11350 PL~480

Some Phenomena in the Goal Carbonization Process, by Z. Frankl, 9 pp. POLISI, per, <u>Koks</u>, <u>Smola</u>, <u>Gaz</u>, Nos 5-6, 1959, pp 210-220. 9221983 OTS 61-11355 PL-480

Optimum Grain-Size Distribution of Coal Charges, by F. Szweijda, 5 pp. POLISH, per, <u>Koks-Smola-Gaz</u>, No 2, 1960, pp 58-61. OTS 61-11350 PL-480

Standardization of Coal Chemicals, by nt. salpetis, K. Wiszniowski, 12 pp. POLISII, per, <u>Normalizacja</u>, Nos T-8, 1960, pp. 360-365, 9221983 UTS 01-11355 M. Najberg, K. Wiszniowski, 12 pp. P1 = 480

Composition and Chemical Structure of Brown Coals From Various Coalfields, Proximate and Goals From Various Coalfields, Proximate and Ultimate Analyses, Rational Analysis and Determination of Functional Group Content, by B. Roga, L. Wnekowaka, 48 pp. POLISH, per, Prace Glownego Instytutu Gornictwa, Komunikar, No 220, 1958, pp 3-28.

OTS 61-11350 PL-480

Polarographic Determination of Metal Traces in Coal Ash of Bituminous Coal, by M. Weclewska, POLISH, per, Prace Glownego Inst Gornictwa, Komunikat, No 242, 1960, pp 3-12.
OTS 61-11350 PL-480

Elaboration of a Method of Measurement of the Carbonization Heat of Coals, by A. Kijewska, 14 pp. POLISH, per, <u>Prace Institutow Humiczych</u>, Vol XI, 1959, pp 229-234. 9221978
OTS 61-31319 PL-480

Investigations Into Density and Density Distribution in Simered-Meial Powder Compacts by the Electrical Conductivity Method, by W. Ceglebski, E. Wantewski, POLISH, per, <u>Prace Inst Huntezych</u>, Vol XIV, 1962, pp 309-315. 1113 6037

Investigations on Agents for Steel Preservation, by J. Zawadski, B. Stanktewicz. POLISH, per, <u>Prace Instytutu Mechaniki</u> <u>Precyzyjnet</u>, Vol X, No 1, 1962, pp 16–31. *BISI 3688

Forging Defects in Large Axles, by R. Musean, RUMANIAN, per, Metalurgia, Vol XV, No 8, 1903, pp 496-498. HB 5726

Application of Sonic and Ultrasonic Vibrations in the Casting of Metals, by Z. Dragos, C. Moldovan, RUMANIAN, per, Metalurgia, Vol XV, No 8, 1903, pp 498-501.

On the Chemical Composition and Structure of Phylrons, by L. Sofronl, C. Cosneanu. RUMANIAN, per, Metalurgia SI Constructia de Masini, Vol XIII, No 10, 1961, pp 847-857. 1113 5730

Chemical Fertilizer for Fertilizer, by I. Deleanu, RUMANIAN, per, <u>Via., Economica</u>, Vol II, No 12, 20 Mar 1904, pp 1, 10.
JPRS 24432

The General Characteristics of Integration in Mining and Metallurgy, by-Velimir Milutinovic, 17 pp. SERBOCROATIAN, per, Tehnika, Vol XV, No 2, 1964, pp 257-263. JPRS 23969

The Development of the Yugoslav Chemical Industry In 1904-1970, by S. M., 10 pp. SERBOCROATIAN, per, <u>felmika</u>, Vol XV, No 2, 1964, pp 315-348. JPRS 23969

Modern Uses of Petroleum in the Iron and Steel Industry, by J.G.C. Pope. SPANISH, per, <u>Revista Latinoamericana de Siderurgia</u>, Vol IV, No 42, 1963, pp 24-33, bdSl 3658

Scientific Materials & Merallurgy (Contd)

Some New Metals and Their Importance, Especially as Alloying Elements for Improving the Properties as Alloying stements for improving the Properties of Steel, by G. Bjorling. SWEDISH, per, <u>Jernkontorets Annaler</u>, Vol CXLVII, No 4, 1963, pp 357-376, BISI 3606

Behaviour of Hydrated Cement Minerals Under the Action of Aggressive Types of Water Considered With Reference to Concrete Corrosion, by SWEDISH, per, Nordisk Betong, Vol VI, No 3, 1962, pp 223-234. CSIRO/No 6591

Pelletising, by P. A. Ilmoni. SWEDISH, per, Teknisk Tidskrift, 1963, pp 571-578. NZDIA

Electric Are Furnaces as Load Object, by V. Lanner, P. E. Torscke, SWEDISH, per, Teknisk Tidskrift, No 9, 1963, pp 789~790. BIS1 3610

Seminar on Surface Diffusion Satroation of Metals and Coatings, by O. P. Epik, 9 pp. UKRAINIAN, per, <u>Dopovidi Ak Nauk Ukrayin RSR</u>, No I, 1964, pp 138-140.

JPRS 24165

Conference on Strength of Materials and Structural Elements at High Temperatures, by Yu. O. Kashtalyan, 10 pp. UKRAINIAN, per, <u>Dopovidi Ak Nauk Ukrayin RSR</u>, No 1, 1964, pp 141-143. JPRS 24160

Mechanism of the Mobility and Effective Charges of Iona In Metals, by P. P. Kuz'menko, 17 pp. UKRAINIAN, per, <u>Ukrain Flz Zhur</u>, Vol VII, No 2, 1962, pp 117-131. 9221583 AERE-Harwell-Fr-980

Scientific Mathematles & Data Processing

Philosophical Questions of Mathematics, by K. re. Morozov, 46 pp. RUSSIAN, BK, Filosofskie Yoprosy Matematiki, Moscow, 1963, pp 1-48. JPRS 24054

Self-Teaching Systems, by Ivakhnenko Aleksey Grigor'yevich, (DC-10507) RUSSIAN, bk. <u>Samoobuchayushchiyesya Sistemy</u>, 1963, pp 1-328. *JPRS

Computer Engineering as Applied to Staffstical Investigations and Compitation of Automatic Control Systems, by V. V. Solodovníkov, Va. S. Ma veyev,

RUSSIAN, ok, Vychislitel naza Tekinika v Primenenii diya Statistichesliki Issledovaniy i Raschetov Sistem Avtoma Icheskog, Upravleniya, Moseuw, 1963, 165 pp. 3 ACSI 1-1633

ID 2201015164

Digital Tracking System for an Automatic Reader, by V. A. Kovalevskiy, A. G. Semenovskiy, 9 pp. RUSSIAN, per, <u>Avtomatika i Priborostroveniye</u>, No 1, 1900, pp 34-38. JPRS 24436

Scientific Mathematics & Data Processing (Contd)

57.-

The Dimensionality of Nonseparatle Spaces, Parts I and II, by M. Katetov. RUSSIAN, per, Chekhoslovat Matemat Zhur, Vol II (77), 1952, pp 333-368: Vol VI (81), 1956, pp 485-516.
*NASA TT F-222

Problems of the Calculation of the Speed of Operation of Equipment and the Evaluation of the Productivity of Digital Computing Machines, by Ye. I. Mamonov.

RUSSIAN, per, Inchemento-Pizithesky Inst. Vychislitelnaya Tekhnika, No 2, 1961, pp 8-20, *PTD-TT-64-518

The Algebra of Resolving Fluxes in Radiant Exchange, by G. L. Polyak, V. N. Adrianov, RUSSIAN, per, <u>Inzherno Fiz Zhur</u>, Vol V, No 7, 1962, pp 70-77.

*Redstone Arsenal

On Completeness in a Class of Non-Jordan Regions, by S. N. Mergetjan, A. P. Famadjan, 24 pp. RUSSIAN, per, <u>Iz Ak Nauk Armyanskoy SSR, Ser Fizikomatemat Estesivennykh Tekh Nauk</u>, Vol VII, 1954.
Amer Math Soc

Qualitative Investigation of a Certain System of Differential Equations of the Theory of Regulation, by N, N, Serebryakova.
RUSSIAN, per, <u>Iz Ak Nauk SSSR Oldel Tokh Nauk Mekh I Mash</u>, No 5, 1963, pp 29-41.
*FTD-TT-64-417

The Variation of Curves Along a Fixed Direction by V. A. Zalgaller, 14 pp. RUSSIAN, per, 12 Ak Nauk SSSR, Ser Matemat, Vol XV, 1951, pp 463-476. Amer Math Soc

The Burnside Problem, by A. I. Kostrikin, 38 pp. RUSSIAN, per, <u>1z Ak Nauk SSSR</u>, <u>Ser Matemat</u>, Vol XXIII, 1959, pp. 3-34. Amer Math Soc

Unconditional Summability, by P. L. Ul'janov, 30 pp. RUSSIAN, per, <u>1z Ak Nauk SSSR</u>, <u>Ser Matemat</u>, Vol XXIII, 1959, pp 781-808.

Fransformative Semigroups, by V, V, Vagnet, 15 pp. RUSSIAN, per, 12 Vysshikh Ucheb Zaved Matemat, No. 4(17), 1960, pp. 36–48. Amer Math Soc.

Automorphisms of Semigroups of Topological Mappings, by L. M. Gluskin, 12 pp.
RUSSIAN, per, 12 Vysshikh Ucheb Zaved Matemat, No 6(19), 1960, pp 62-73.
Amer Math Soc

On a Theorem of Functional Analysis, by S. L. Sobolev, 20 pp. RUSSIAN, per, <u>Maternat Shornik</u>, Vol IV, No 46, 1938, pp. 471-497. Amer Math Soc

Irreducible Unitary Representations of Locally Bicompact Groups, by L. M. Gellfand, D. A. Raikov, to pp. RUSSIAN, per, <u>Maternat Sbornik</u>, Vol XIII, No. 35, 1943, pp. 301-316. Amer Math Soc

On the Monodromy Group of an Algebraic Function, by V. A. Kurbatov, 46 pp. RUSSIAN, per, <u>Maternat Sbormk</u>, Vol XXV, No 67, 1949, pp. 51-94. Ame: Math Soc

Scientific Mathematics & Data Processing (Contd)

2 8 2 LE REPORT - 1 - 1 - 1 - 1 - 1 - 1

Boundary-Value Problems for Elliptic Equations Degenerating on the Boundary of a Region, by M. I. Visik, 64 pp. RUSSIAN, per, Matemat Spornik, Vol XXXV, No 77, 1954, pp 513-568.

Amer Math Soc

Representations of Ordered Semigroups, by V. V. Vagner, 42 pp.
RUSSIAN, per, Matemat Sbornik, Vol XXXVIII, No 80, 1956, pp 203-240.
Amer Math Soc

On Error Bounds for Approximate Methods of Estimation of Eigenvalues of Hermitian Kernels, by I. P. Mysovskih, 14 pp. RUSSIAN, per, Matemat Shovnik, Vol XLVIII, No 90, 1959, pp 137-148.

Amer Math Soc

On Error Bounds for Eignevalues Calculated by Replacing the Kernel by an Approximating Kernel, by I. P. Mysovskih, 12 pp.
RUSSIAN, per, Matemat Sbornik, Vol XLIX, No 91, 1959, pp 331-340.
Amer Math Soc

Nonhomogeneous Generalized Functions of Two Variables, by M. V. Fedorjuk, 18 pp. RUSSIAN, per, <u>Matemai Shornik</u>, Vol XLIX, No 91, 1959, pp 431-446. Amer Math Soc

Semigroups Associated With Generalized Heaps, by V. V. Vagner, 32 pp. RUSSIAN, per, Matemat Sbornts, Vol 1.11, No 94, 1900, pp 597-028. Amer Math Soc

On Infinite Locally Finite Groups With Finite Sylow Subgroups, by S. N. Gernikov, 8 pp. RUSSIAN, per, <u>Matemat Shornik</u>, Vol L.II, No 94, 1960, pp 517-552. Amer Math Soc

Spectrum of Singular Boundary Problems, by M. Sh. Birman. RUSSIAN, per, Matemat Sbornik, Vol LV(97), 81.21 [Del. on 175, 171]

Transformations of Kernels of Integral Equations and Their Influence on the Spectra of These Equations, by I. C. Gohberg, M. G. Krein, 34 pp. RUSSIAN, per, <u>Maternat Zhur</u>, Vol XIII, No 3, 1901, pp. 121-138.

Amer Math Soc

Method of Constructing Pneumatic Computers of Continuous Action and Ways of Utilizing Them, by N. D. Lanin, V. I. Pashintseva, RUSSIAN, per, Nauchno-Tekh Obschestvo Pribor Promy. Primenentye Vychis Tekniki Dlya Avtomat Proiz, 1959, pp 445-457.

Hall Bases of Certain Classes of Groups, by P. A. Gol'berg, 34 pp. RUSSIAN, per, <u>Sibirskiy Matemat Zhur</u>, Vol I, 1900, pp 14-44. Amer Math Sec

The Decomposition of Unitary Representations of a Locally Compact Group Into Factor-Representations, by M. A. Naimark, 12 pp. RUSSIAN, per, <u>Sibirskiy Matemat Zhur</u>, Vol II, 1961, pp. 80-99. Anc: Math Soc

Scientific Mathematics & Data Processing (Cound)

The Plane Motion of a Viscous Incompressible Fluid, by K. K. Golovkin, 54 pp. RUSSIAN, per, Trudy Matemat Inst Imeni A. A. Steklovs, Vol LIX, 1960, pp 37-86. Amer Math Soc

The Cauchy Problem for the Kinetic Equation of Plasma, by S. V. Iordanakly. RUSSIAN, per, Trudy Maternat Inst Imeni A. A. Steklova, Vol L.X, 1961, pp 181-194. Amer Math Soc

The Uniqueness Theorem in the Inverse Problem of Spectral Analysis for the Schrodinger Equations, by Ju. M. Berezanskiy, 70 pp. RUSSIAN, per, Trudy Moskov Matemat Obshch, Vol VII, 1958, pp 3-62, Amer Math Soc

Conditions for Completeness of a System of Root Subspaces for Non-Selfadjoint Operators With Discrete Spectra, by V B. Lidskiy, 42 pp. RUSSIAN, per, <u>Trudy Moskov Matemat Obsheh</u>, Vol VIII, 1959, pp 83-120. Amer Math Soc

Decomposition of a Tensor Product of Irreducible Representations of the Proper Loreitz Group Into Irreducible Representations. I. The Case of a Tensor Product of Representations of the Basic Series, by M. A. Naimark, 36 pp. RUSSIAN, per, Trudy Moskoy Matemat Obsheh, 1959, pp 121-153. Amer Math Soc

Spectral Theory of Operators in Spaces With an Indefinite Metric, by I. S. Johyldov, M. G. Krein, 92 pp. RUSSIAN, per, <u>Frudy Moskov Matenial Obsheh</u>, Vol VIII, 1989, pp. 413-490. Amer Math Soc

Decomposition of a Tensor Product of Irreducible Rpresentations of the Proper Lorentz Group Into Irreducible Representations. II. The Case of the Tensor Product of Representations of the Basic and Supplementary Series, by M. A. Naimark, 52 pp. RUSSIAN, per, Trudy Moskov Matemai Obsheh, 1900, pp 237–282.

Amer Math Soc

Decomposition of a Tensor Product of Irroducible

trreducible Representations. III. The Case of a Lensor Product of Representations of the Supplementary Series, by M. A. Naimark, 43 pp. RUSSIAN, per, <u>Trudy Muskoy Matemat Obsheh</u>, Vol X, 1961, pp. 181-216. Amer Math Soc

The Fixed Point Method in Analysis, by V. V. Nemyckiy, 38 pp. RUSSIAN, per, <u>Uspekh Matemat Nauk</u>, Vol 1, 1936, pp 141-174. Amer Math Soc

A Pneumatic Continuous Action Computer and Delay 18toc of Small Overall Dimensions, by N. D. Lanin.
RUSSIAN, per, <u>Voprosy Pnevmo-1 Gidroaviontatiki</u>, Ak Nauk SSSR, 1960, pp 138-147.

*F1D-11-64-523

A limite Difference Analog of Green's Function in the Enrece-Dimensional Case, by L. A. Ljusternik, 22 pp. RUSSIAN, per, Vycinshirelinaya Matematika, Vol 1, 1951, pp. 3–22. Amer Math Soc

Scientific Mathematics & Data Processing (Contd)

A Method for Improving the Accuracy of Grid Solutions of the Poisson Equation, by E. A. Volkov, 20 pp. RUSSIAN, per, <u>Vychialitel*naya Matematika</u>, Vol I, 1957, pp 62-80.

Amer Math Soc

On Estimation of the Error in Finding Eigenfunctions by the Mothod of Finite Differences, by V. K. Saulley, 30 pp.
RUSSIAN, per, Vychislitellnaya Matematika, Vol 1, 1957, pp 87-115.
Amer Math Soc

Numerical Method of Calculating Optimum Rate Control for Linear Systems, by B. N. Pshenichnyy, 11 pp. RUSSIAN, per, Zhur Vychisi Mat I Mat Fiz, Vol IV, No 1, Jan, Feb 1964, pp 52-60. JPRS 24055

A Compiler, by V. N. Popov, V. A. Stepanov, 22 pp. RUSSIAN, per, Zhur Vychisl Mate 1 Mate Fiz, Vol IV, No 1, Jan, Feb 1964, pp 78-95. JPRS 24055

An Algol-60 Converter, by M. R. Shura-Bura, E. Z. Lyubimskiy, 20 pp. RUSSIAN, per, Zhur <u>Vychisi Matemat i Matemat Fiz</u>, Vol IV, No 1, 1964, pp 96-112. JPRS 23955

The Construction of an Inhibitor Circuit in an Operator Schematic With References to the Library, by Yu. I. Smirnov, 19 pp. RUSSIAN, per. Zhur Vychisl Mate I Mate Fiz. Vol IV, No. I, Jan, Feb 1964, pp 113-119.

JPRS 24055

Finare and Infinite, Divergence and Continuity, by Hua Lo-keng, Wang Yuan, 38 pp. CHINESE, per, K'o-hsuch T'ung-pao, No 12, 1963, pp 4-21. JPRS 24224

Sales Accounting in an Integrated Steelworks With Special Reference to Electronic Data Processing Units, by H. Bodewig, G. Schumacher. GERMAN, per, <u>Staht und Elsen</u>, Vol LXXXIII, 1963, pp 930-939. BISI 3379

tino Digital Values, by Jurgen Gottschald, Kutt Franz, 15 pp. GERMAN, Patent No 1,140,721, 1963, 9220770 AEC-NP-Tr-1101

Write Without Programme: A Process for Preparing Machine-Punched Cards From Non-Programmed Punched Tape, by H. H. Bernstein, 8 pp. 17ALIAN, rpt, 1963. 9220580 AERE-Harwell-Tr-994

Punched-Tape Techniques in Documentation Centres With Punched-Card or EDPM Installations, by H. H. Bernstein, 13 pp. ITALIAN, rpt, Euratom Symposium on Punched-Tape Icehinques in Documentation, 28-30 May 1963, 9220573
AERE-Harwell-Tr-992

Accessories to: Punched-Tape Equipment, by W. Molden, 9 pp.
HALIAN, rpt, Eurotom Symposium on Punched-Tape
Techniques in Documentation, 28-30 May 1963, 92205-4
AERE-Harwell-Tr-98*

Scientific Mathematics & Data Processing (Contd)

Buildup of Coefficient Factors of the J. J. Taylor Equation, by S. Buscaglione, R. Manzini, ITALIAN, rpt, Sui Pattori di Accumulazione: Coefficienti dela Formula di J. J. Taylor, Feb 1964.

Approximation Method for Calculating the Density Approximation Method for Calculating the Density Marrix Based on Path Integrals, by Ryuzo Abe, 20 pp. JAPANESE, per, Busseiron Kenkyu, No 79, 1954, pp 101-128. 9220792
AEC-UCRL-Tr-1026(L)

The Effect of External Periodic Forces on Single Frequency Vibrations in Systems With Many Degroes of Freedom, by Yu. O. Mytropol's kyy, 5 pp. UKRAINIAN, por, Dopovidi Ak Nauk Ukrayin RSR, No 2, 1964, pp 155-158.

JPRS 24138

Variable Structure Algebraic Transformers, by VI. Yo. Pukhov, 6 pp.
UKRAINIAN, por, <u>Dopovidi Ak Nauk Ukrayin RSR</u>,
No 2, 1964, pp 181-184.
JPRS 24138

Hermitian-Positive Kernels on Homogeneous Spaces, by M. G. Krein, 40 pp. UKRAINIAN, per, <u>Ukrain Matemat Zhur</u>, No 4, 1949, pp 64-98. Amer Math Soc

Scientific Nuclear Science & Technology

Investigations of Nuclear Physics and Solid State Physics in IRT Reactor of Kurchatov, by A. M. Demidov, M. I. Pevener. A, M. Delmaov, M. I. Pevener.
RUSSIAN, rpt, <u>Issledovaniya po Yadernoi Fizike</u>
I Fizike Tverdogo tela na Reaktore IRT Jac Iment
I. V. Kurchatova, Moscow, 1963, 23 pp.
AEC

Beta Decay of the Pion, by A. F. Dunaitsev. RUSSIAN, rpt, Joint Institute for Nuclear Research.

Metabolism and Toxicology of Plutonium-299; Evaluation of the Internal Contamination of Persons Professionally Exposed, by P. Henry. FRENCH, rpt. *AEG

Neutron Dosimetry and Irradiation of Solids, by G. Perriot, A. P. Schmidt, 152 pp. FRENCH, rpt, 1962. 9221935 AEC-HW-Tr-03

Sodium Sampling Device on a Circuit for Impurity Analyses, by J. Sannier, R. vingot, 8 pp. FRENCH, rpt, 30 Sep-2 Oct 1963. 9221239 AEC-1r-0304

Flow Measurements Carried Out in France by Means of Radioactive Tracers by the Integration Method, by J. Guizerix, G. Grandelement, et al. 32 pp. FRENCH, rpt, Symposium on the Proceedings on the Application of Radioisotopes in Hydrology, 5-9 Mar 1963, pp. 755-281. 9221936

Resolution of Problems Concerned With Treatment FRENCH, per, Bulletin d'Information Scientifique et Technique, No 69, 1963, pp 3-6. 9221928

Scientific Nuclear Science & Technology (Contd)

Conditioning and Storage of Large-Size Solid Wastes From Reactors, by B. Mestre, 12 pp. FRENCH, per, <u>Bulletin d*Information Scientifique et</u> Technique, No 69, 1963, pp 19-25. 9221933 AEC-Tr-6297

The Conditioning of Weakly Activated Solid Waste Matter at the Marcoule Center, by J. Rodier, Matter at the Marcolne Center, by J. Rodler, H. Bouzgues, et al, 15 pp. FRENCH, per, Bulletin d'Information Scientifique et Technique, No 69, 1963, pp 27-35. 9220784 AEC-Tr-6298

Problems Presented by Radioactive Waste at the Grenoble Nuclear Research Centor, by E. de Robien,

FRENCH, per, Bulletin d'Information Scientifique et Technique, No 69, 1963, pp 37-41. 9220777

Problems Presented by the Treatment of Weakly Radioactive Effluents in an Atomic Center, by C. Wormser, 10 pp. FRENCH, per, Bulletin d'information Scientifique et Technique, No 69, 1963, pp 43-48. 9220787

Statistical Methods in Radioprotection, by R. Court. FRENCH, per, <u>Bulletin d'Informations Scientifiques</u> et <u>Techniques</u>, No 72, 73, May, Jun 1963, pp 83-89.

A Mothod for Producing Beams of Negative Ions, by W. Gentner, G. Hortig, 9 pp.
GERMAN, rpt, Max-Planck-Institut fuor Kernphysik, Heidelberg, 1962. 9221775
AEG-NP-Tr-1107

Influence of the Reflector on the Temperature Coefficients of a Reactor, by Eberhard Kern. GERMAN, per, Atomkernenergie, Vol VIII, No 2, 1963, pp 41-51.

On the Problem of the Expediency of Prestressed Gyclindrical Concrete Shields as Reactor Pressure Tanks, by J. Seetzen, K. Sayar, 19 pp. GERMAN, per, <u>Kertechnik</u>, Vol IV, No 11, 1962, pp 485-491. 9221918 AEC-Tr-6319

od Ostlorou Osorajim Proggerog

in Gascous Diffusion. K. Higashi, C. Shimizu, et al, 15 pp. JAPANESE, per, <u>Journal of the Atomic Energy Society of Japan</u>, Vol IV, No 8, 1962, pp 516-519. AEC-NP-Tr-1084

Scientific Physics

The Effect of Ultraviolet Radiation on Plants, by A. P. Dubrov. RUSSIAN, hk, Deystviye Ul¹trafioletovoy Radiatsii na Rasteniya, 1963, 123 pp. *FTD-TT-64-493

Solid State Diffusion in Metals and Alloys, by S. D. Gertsriken, I. Ya. Dekhtyar, 528 pp. RUSSIAN, bk, Diffuziya v Metallakh i Splavakh v Iverdoi Faze, Moscow, 1960, 364 pp. 9222239-V AEC-1r-6313

Dynamics of a Viscous Incompressible Fluid, by N. A. Slezkin, 35 pp. RUSSIAN, bk, Dinamika Vyaskoy Neszhimayemoy Zhidkosti, 1955, pp 350-384. NH 3-5-64

Scientific Physics (Contd)

Motion of a Body of Variable Mass With Constant and Decreasing Expenditure of Power in a Gravitational Field. Part III, By G. L. Grodzovskiy, Yu. N. Ivanov, 61 pp. RUSSIAN, bk, O Dvizhenii Tela Peremennov Massav s Postovannov i Ubyvayushchey Zarratov Moshchnosti v Gravitatsionnom Pole. Chast III, pp 1-66. 9692310 FTD-TT-63-973

Gasdynamics of Combustion, by K. I. Shchelkin, Ya. K. Troshin, RUSSIAN, bk, Gazodinamika Goreniya. 1963, pp 3-6; 215-238; 254-255.

*Navy/APL J369

Gyroscopic Effect, Its Phenomena and Application, by V. A. Pavlov, 79 pp.

RUSSIAN, bk, Giroskopicheskiy Effekt, Ego Provavleniya i Ispol'zovaniye, Chapters IV, VII, VIII, 1961, pp 52-75; 118-147, 9692438

FTD-TT-63-837

Investigation of Reaction at 2.8 Bev, by V. K. Grigor'yev, A. P. Grishin, et al. RUSSIAN, rpt, Issledovante Reaktsii pri Energii Bev, Moscow, 1964, 12 pp.

The Heating of Bodies in Motion at High Supersonic Speeds, by G. I. Sakharov, V. V. Andreyevskiy, 133 pp. RUSSIAN, bk, Nagrey Tel Pri Dvizhenii s Bol'shimi Syerkhzyukovymi Skorostyumi, 1961, pp 3-406. 9692304 FTD-TT-63-816

General Theory of Shells and Its Applications in Engineering by V. Z. Vlasov, 913 pp. RUSSIAN, bk, Obshchaya Teoriya Obolochek I <u>Toyo Privalentya v Tekinike, 1949, pp 1-784.</u> 9222100-V NASA TT F-99

Fundamentals of Cosmic Electrodynamics, by S, B, Pikel^{*}ner, 208 pp.
RUSSIAN, bk, <u>Qsnovy Kosmicheskoy Elektrodinamiki</u>,
Moscow, 1961, pp 1-295.
NASA TT P-175

Aurorae and Afrgiow. RUSSIAN, bk, Polyarnyye Siyaniya i Svecheniye Nochnogo Neba, IGY Program, Section IV, No 10, 1963, 155 pp. *NASA TT F-204

The Application of the Theory of True-Stress Curves to Various Temperature Conditions of Deformation, by V. Ya. Shekhter, 17 pp.
RUSSIAN, bk, Protsessy Shtampovki i Ikh
Tekhnologicheskiye Parametry, 1959, pp 146-154, 5692298
F TD- TT-63-768

Theory of Hydrodynamic Lubrication of Porous Bearings, by M. V. Korovchinskiy. RUSSIAN, bk, <u>Frentye I Iznos v Mashmakh</u>, No 16, 1962, pp 151-218.
*FTD-TT-64-521

Dosimeters of Ionizing Radiation Based on the Measurement of Thermoluminescence of Alumophosphate Glasses, by 1. A. Bochvar, A. A. Vasti'yeva.
RUSSIAN, per, Atonmaya Energiya, Vol XV, No 1, Jul 1963, pp 48-52.
*Navy/NRL

Width of Energy Levels of an Atom With a High Principal Quantum Number, by O. B. Firsov, 5 pp. RUSSIAN, per, <u>Dok Ak Nauk SSSR</u>, Vol LXIX, No 3, 1949, pp 357-359. AID Report 1-04-18

Scientific Physics (Contd)

The Catalytic Autoxidation of Primary Aromatic Amines in the Presence of the Complex Pyridine-Cuprous Chlorids, by A. P. Terentyev, Ya. D. Mogilyanskiy.

RUSSIAN, per, Dok Ak Nauk SSSR, Vol CIII, No 1, 1955, pp 91-93.

*AEC

Noup-lactzing Electrodes for Detecting Slowly Varying Biopotentials in Internal Cavities, by V. I. Bel'kevich, E. Yu. Vende, et al, 5 pp. RUSSIAN, per, <u>Fiziologicheskii Znurval SSSR imeni</u> I. M. Sechenova, Vol XLIX, No 3, 1963, pp 379-381. 9220713 NASA TT F-199

Experimental Study of the Surface Friction on a Plane Plate in a Supersonic Flow in the Presence of Heat Exchange, by L. V. Kozlov. RUSSIAN, per, Iz Ak Nauk SSSR Otdel Tekh Nauk Mekh i Mashin, No 2, 1963, pp 11-19. Navy Tr 3755/APL T945

Calculation and Experimental Investigation of Autooscillations of Cylindrical Shells and Panels in a Gas Flow, by R. Ye. Lamper, L. G. Shandarov, 15 pp. RUSSIAN, per, Iz Ak Nauk SSSR, Oldel Tekh Nauk,

RUSSIAN, per, Iz Ak Nauk SSSR, Oldel Tekh Nauk, Mckh 1 Mash, No 3, 1963, pp 58-64, 9692367 FTD-TT-63-1227

The Tunnei Effect in Films of Degenerate Gallium Arsendie, by L. C. Lawrent'yeva, A. P. Vyatkin, 5 pp. RUSSIAN, per, 12 Yyashikh Ucheb Zayed Fiz. No 5, 1963, pp 174-176. Navy Tr 3763/NRL 964

Solubilization of Motor Oil Contaminants With Metal Sulfonates, by S. E. Krein, A. B. Vipper. RUSSIAN, per, Khim 1 Tekh Topliv i Masel, Vol VIII, No 11, 1903, pp 32-37.
*Navy/NRL

On the Kinetics of Photochemical Transformations and Concentration Pluorescence Extinction of 9-Mono-alkylated Anthracenes, by A. S. Cherkasov, T. M. Vember, 12 pp. RUSSIAN, per, Optika 1 Spektroskopiya, Vol IV, No 2, 1958, pp 203-210. 9221920 AEC-Tr-6309

Some Non-Stationary Problems of Radiative Heat Transfer, by I. V. Nemchinov, 50 pp. RUSSIAN, per, <u>Prik Mate i Tekh Fiz</u>, No 1, 1960, pp 36-57. Purdue Univ A & ES TT-4

Boundary Conditions on Ionized Gas-Solid Contact Surface, by G. A. Lyubimov, 13 pp. RUSSIAN, per, Prik Mekh I Tekh Fiziki, No 4, 1963, pp 78-82, 9692320 FTD-TT-64-128

Localized Modes of Vibrations in lonic Crystals With an Isotopic Defect, by G. S. Zavt, N. N. Kristoffel. RUSSIAN, per, <u>Teudy Inst Fiz 1 Astron Ak Nauk Estonskoy SSR</u>, No 23, 1963, pp 3-17.

*Navy/NRL

Nonstationary Heat Transfer in Spherical Bodies, by L. I. Kudryashev, A. A. Smirnov. RUSSIAN, per, <u>Trudy Inst Kuybyshevsk Aviats</u>, Vol XV, No 1, 1962, pp 105-116.
*FTD-TT-04-514

Some Problems in the Theory of Adhesion of High Polymers, by R. M. Vasenin.
RUSSIAN, per, Frudy Nauchnyve Moskov Tekh Inst Legk Prom. No 26, pp 46-68.
O1 7543

Scientific Physics (Contd)

Determination of the Proquencies of Free Vibrations of Blastic Systems, by K. K. Keropyan.
RUSSIAN, per, <u>Trudy Rostovskiy Inzhenerno-Stroitel'skiy Institut</u>, No 6, 1958, pp 159-179.
Navy Tr 3790
APL T976

Micrographic Analysis of the Oxidation Kinetics of Iron, by V. I. Tikhomirov, V. V. Ipat'yev.
RUSSIAN, per, Uchenye Zapiski Leningrad Gosud Univinent A. A. Zhdanova, No 175, Seriya Khim Nauk,
No 14, Part I, 1954, pp 52-70.
BISI 3200

Investigation of the Instability of a Positive Column in an Axial Magnetic Field, by A. R. Akhmedov, A. A. Zaytsev.
RUSSIAN, per, Vest Moskov Univ, Ser III, Fiz i Astron, No 1, 1964, pp 3-10.
*NASA TT F-218

Effect of a Foreign Gas on the Absorption Spectrum Near the Limit of the Series, by O. B. Firsov, 12 pp.
RUSSIAN, per, Zhar Eksper 1 Teoret Fiz, Vol XXI, No 5, 1951, pp 627-633.
AID Report T-64-18

AID Report T-64-18
Stability of Rods in the State of Creep, by V. F. Vorobyev, 17 pp.

V. F. Vorobyev, 17 pp. RUSSIAN, per, <u>Zhur Prik Mekh J Tekn Fiz,</u> No 6, 1961, pp 135-114. 9692317 DDC RSIC-145

Gertain Problems of the Hydrodynamics of Relaxing Media, by I. P. Stakhanov, Ye. V. Stypochenko, 35 pp. RUSSIAN, per, Zhur Prikl Mekh i Tekh Fiziki, No 2, 1963, pp 3-20. 9692318 FTD-TT-63-839

The Breakup of Drops and a Fluid Stream by an Atr Shock Wave, by A.A. Buzukov, B pp. RUSSIAN, per, Zhur Priki Mekh i Tekh Fiziki, No 2, 1963, pp 154-158. 9692318 FTD-TT-63-839

The Structure of a Flaine Front, by A. S. Pleshanov, 8 pp. RUSSIAN, per, Zhur Prikl, Mekh 1 Tekl: Flziki, No 2, 1963, pp 169–172. 9692318 FTD-1T-63–839

Measuring the Pressure of High Intensity Pulse Jets by the Tensometer Method, by V. P. Borodin, B. V. Voytsekhovskiy, et al, 10 pp. RUSSIAN, per, Zhur Prik Mekh i Tekh Fiz, No o, 1963, pp 104-107. JPRS 23920

On the Diffusional Decay of Plasma in a Magnetic Field When Nonlinear Effects are of Importance, by G. A. Grinberg, RUSSIAN, per, Zhur Tekh Fiz, Vol XXXIII, No 12, 1903, pp 1430-1443, *Navy/APL J 350

On a Peculiarity of Plasma Heating in Toroidal Systems, by G. V. Skornyakov, RUSSIAN, per, Zhur Tekh Fiz, Vol XXXIII, No 12, 1903, pp 1477-1478, *Navy/APL J351

Threshold Pumping Power of a Laser, by A. M. Rather. RUSSIAN, per, Zhur tekh Fiz, Vol XXXIV, No 1, 1904, pp 115-121. *Navy 'API J36"

Scientific Physics (Contd)

The Measure of a Gas Density Behind a Shock Wave in a Shock Tube by Means of Electron Beam Method, by B. P. Busygin, G. K. Tumakayev. RUSSIAN, per, Zhur Tekh Fiz, Vol XXXIV, No 1, 1964, pp 122-127.

*Navy/APL J366

Effect of Pressure on the Combustion Stability of Explosives, by K. K. Andreyev, V. V. Gorbunov. RUSSIAN, por, Zhur Ysgs Khim Obshch imeni D. I. Mendeleveya, Vol VIII, No 5, 1963, p 592.
*Navy/APL J356

Effect of Energy Level Degeneration and Radiation Losses on the Optical Properties of the Three-Level Laser, by B. I. Stepanov, V. P. Gribkovskiy, BELORUSSIAN, per, <u>Dok Ak Navuk Beloruss</u>ian SSR, Vol VII, No 1, 1963, pp 17-21. Navy Tr 3787 APL 1961

Equations for Coherent Scattering of Radar Waves From Clouds and Raindrops, by Ch[†]i-ch[†]en Li, CHINESE, per, <u>Clung-Kuo K[†]o-Hsueh</u>, Vol XII, No 5, 1963, pp 695-708.

Supersonic Expansion and Compression of Combustion Gases and Air With Variable Specific Heats, by Chong-hua Wu.
CHINESE, per, <u>Chung-Kuo K'O-Hsueh</u>, Vol XII, No 12, 1903, pp 1895-1933.
*FTD-TT-04-488

Alkyl and Amine Aromatics and the Lewis Acid Effect Electromagnetic Resonance of its Free Radical, by Hsu Kuang-chib, Chien Su-ming, et al. CHINESU, per, Kio-hsuch Tiung-pao, No 12, 1963, pp 47, 48. JPRS 23893

High Temperature Lubrication and Inorganic Solid Substances, by Chien Shao-II, Ou-yang Chin-IIn, 7 pp. CHINESE, per, Kio-hsuch Tung-pao, No 12, 1963, pp 59-61, JPRS 23893

Magnification of 18-8 Stainless Steel Grystal Corrosion in Low Chromium Areas, by Hua Pao-ting, Shen Hsing-su, et al, 5 pp. CHINESE, per, Kto-bauch Tlung-pao, No 1, 1901, pp 81, 82.

JPRS 24350

The Magnetic Resonance of Aromatic Hydrocarbon Carbonium Ions, by Chu Tzu-ying, Plan Chia-lai, 8 pp.
CHINESE, per, Klo-hsuch Tlung-pao, No 2, 1964, pp 27, 28.
JPRS 24552

Electron Magnetic Resonance Spectra of V2O5 Type of Catalyst, by Hsu Kuang-chih, Chien Su-ming, et al, 8 pp. CHINESE, per, kto-hsuen Tung-pao, No 2, 1964, pp 157-160.

JPRS 24552

Discontinuous Flow of Compressible Fluid Normal to a Plate, by Momeilo Zdravkovic. CROATIAN, per, Lelmika, No 4, 1963, pp 611-620. *FTD-TT-64-496

The Stress Condition of a Thick-Wall Prestressed Concrete Container for High Pressure, by Radim Servit.
CZECH, per, Jaderna Energie, Vol IV, No 1, 1958, pp 19-26.
*AEC

Scientific Physics (Contd)

Exponential Model of Biological Excretion of a Radio-Isotope and Its Utilization When Calculating Absorbed Radiation Dosages, by Frantisek Vitex, Zdensk Dienstbier, 9 pp. CZECH, per, Jaderna Energie, No 11, 1960, pp 383-385. 9692303 FTD-TT-63-923

Contamination of Milk After an Accidental Atmospheric Pallout of Iodine-131, by R. J. Kirchmann, R. R. Boulenger, 16 pp. FRENCH, rpt, Colloque du Pollution Radioactivo des Milieux Gazeux, 12-16 Nov 1963, 9221926

Measurements of the Effective Cross Sections of Fissionable Materials by an Oscillation Method in the Critical Assemblies, by R, Vidal, O, Tretiakoff, et al, 31 pp.
FRENCH, rpt, Colloquium on Exponential and Critical

FRENCH, rpt, Colloquium on Exponential and Critical Expertments, 2-6 Sep 1963. 9220585

An Experimental and Theoretical Study on the Scress Distribution in Built-in Beams, by Marcel Robert, FRENCH, rpt, Ecole Polytechnique Federale, Publication du Laboratoire de Photo-Elastiche No 1, 1943, pp 1-144.
*Redstone Arsenal

Evolution of the Liquid-Wasie Problem in the Centers in the Paris Region, by J. Bourdrez, 12 pp. FRENCH, per, Bulletin d'Information Scientifique et Technique, No 69, 1963, pp 11-17. 9220783

A Study of Remote Interactions Within Macromolecular Chains, by M. Leng, H. Benoit, FRENCH, per, <u>Journal de Chimie Physique</u>, Vol LIX, 1962, pp 929-932.
*AEC

Probability of lonization by the Transfer of the Energy of Excited Atoms to Molecules, by R. L. Platzman.
FRENCII, per, Journal de Physique et le Radium Vol XXI, 1960, pp 853-858.

The Electronic Structure and Magnetic Properties of Transicion Metals and Alloys, by J. Friedel, 21 pp. FRENCH, per, <u>Journal de Physique et le Radium</u>, Vol XXIII, No 8, 9, 1962, pp. 501-510, 9221917 AEC-AI-Tr-35

The Development of Photoelasticity, by A. Pirard-FRENCH, per, La Metallurgie, Vol LXXIX, 1947, pp 17-21. *Redstone Arsenal

Construction and Study of a Gas Scintillation Counter, by U, Strohbusch, 39 pp. GERMAN, rpt, 1962. 9220575 AEC-UCRL-Tr-1028(L)

Nuclear Radiation Meters, by Kurt Languaus. GERMAN, bk, <u>Korostraulungsmysogerate</u>, 1 Sup 1900, pp 5-325. *ACSI I-4555 1D 2204012104

Collection of the Dust Laden Gas Yielded in the Oxygen Fop Blowing Steelmaking Process Without Combustion, by H. Hoff, J. Maatsch.
GERMAN, rpt, Paper Presented at the International Congress on Oxygen Steel Plants at Le Touquet and Duntink, 23-26 Sep 1963.
BIST 3479

Scientific Physics (Contd)

A6B and A6BX Type Spectra, Nuclear Resonance Spectra of Isoproplys, by J. Ranft. GERMAN, per, Annalen der Physik, Vol X, No 1, 2, 1962, pp 1-30. *FTD-TT-64-537

Magnetic Stepped Films as Storage Elements, by H. Billing. GE RMAN, per, <u>Elektronische Rechenanlagen</u>, No 6, 1963, pp 257-261. *ACSI I-4454 ID 2204009804

Ultrasonic Detection of Defects in Pipes, by E. Veksler, V. P. Krivusha.
GERMAN, per, <u>Energetika</u>, Vol XI, No 1, 1963, pp 10-11.
CEGB 3185

Distillation, by Werner Kuhn, 76 pp.
GERMAN, per, Helvetica Chimica Acta, Vol XXV, No 2, 1942, pp 252-295. 9220768
AEC-NP-Tr-1104

Separation of Grass, Mnts, Gow, and Febbs ton Exchange, by J. Mikulski, I. Stronski, 6 pp. GERMAN, per, <u>Botopentechnik</u>, Vol II, 1962, pp 69, 70. 9221919 AEC-Tr-6308

Physics of High Polymers and Fundamental Physics, by F. II. Muller, 28 pp. GERMAN, per, Kolloid-Zeitschrift, Vol CXXIII, 1951, pp. 06-83. 9220773 AEC-SC-T-64-42

The Dislocation System in Plastically Deformed Copper Single Crystals, by U. Essmann, 35 pp. GERMAN, per, Physica Statos Solidi, Vol III, No 5, 1903, pp 932-949. 9220771
AEC-NP-Tr-1102

The Impact of Meteorites as a Ballistics Problem in Space Travel, by R. Schall, 7 pp. GERMAN, per, Physikalische Blatter, Vol XVIII, No 7, 1962, pp 308-313.
Navy Tr 3798
NRI, 974

Evaluation of Mechanical Filters According to the Oil Smoke Method, by Fritz Bangert, 7 pp. GERMAN, per, Staub, Vol XXI, No 7, 1961, pp. 298-300.
AGSI 1-4333
ID 2204007264

A New Dust Measuring Device for Evaluation of Mechanical Filters, by Fritz Bangert, 6 pp. GERMAN, per, Staub, Vol XXII, No 3, 1962, pp 1-4. ACSI 1-4336 ID 2204007564

Effect of Flow Velocity, Particle Size, and Concentration on the Refining Capacity of Fiber Filters, by Fritz Bangert, 12 pp.
GERMAN, per, <u>Staub</u>, Vol XXIII, No 2, 1963, pp 69-70.
ACSI 1-4337
Il) 2204007664

Elimination of the Coma With Spectrometers Having Spherical Concave Reflectors, by W. Leo. GERMAN, per, <u>Z. fner Angewandte Physik</u>, Vol VIII, No. 4, 1956, pp 196-201. CSIRO/No. 6450

-

Wave Propagation Along a Longitudinally Magnetized Ferrite Rod in an Electrically Anisotropic Environment, by Ernst Neckenburger, 21 pp.
21 pp. GERMAN, per, 2 fuer Angewandte Physik, Vol XIV, No 5, 1962, pp 282-288.
Navy Tr 3794/NRL 965

An Instrument Which Can be Used as an X-Ray Microanalyser, X-Ray Shadow Microscope and Electron Diffraction Apparatus. Experimental Investigations in AI-Cu and Ge, by O. Brummer, K. H. Brauer. GERMAN, per, Z fuer Angewandte Physik, Vol XVI, No 1, 1963, pp 27-37. BISI 3580

Chemisorption as the Initial Process in the Reaction of Ganes With Solids, by It, J. Engell, GERMAN, por, Z. fuer Electrochomie, Vol LXVI, 1962, pp 617-627, *AEC

Thermodynamic and the International Practical Scale, by I. Kirenkow. GERMAN, per, <u>2 fur Instrumentenkunde</u>, Vol LXXI, No 2, 1963, pp 43-47. CSIRO/No 6464

Analysis of Velocity Distribution in a Molecular Beam by Measuremin of Time of Flight, by Friedrich Knauer, 18 pp. GERMAN, per, Z fuer Physik, Vol CXXVI, 1949, pp. 319-335. 9220793 AEC-UCRL-Tr-1032

Higher Excitation Conditions of Farnsworth Centers, by Fritz Laty.
GERMAN, per, Z fuer Physik, Vol CLX, 1960, pp 1-15.
*AEC

The Attachment of Radioactive Atoms to Aerosol Particles, Suspended Matter, in the Magnitude Range of From 0.7 to 5 µ Radius, by Lars Lassen, Hermann Weicksel.
GERMAN, per, Z fuer Physik, Vol CLXI, 1901, pp 339-345.
*Navy/NRI.

Measurement of the Displacement Energy of a Lattice Atom In Alli BV-Compounds by Electron Collision, by R. Bauerlein, 15 pp. GERMAN, per, Z fuer Physik, Vol CLXXVI, 1903, pp. 498-509. 9221938 AEC-Al-Tr-30

Formation of Gaseous Gold Hydride, by Adalbert Farkas. GERMAN, per, Z fuer Physikalische Chemie, Voi LVIII, 1929, pp 467-475.

High Electrolytic Concentration, by R. Haase. GERMAN, per, Z fuer Physikalische Chemic, vol XXXIX, 1903, pp 27-44.
*AEC

On the Temperature Radiation of the Non-Conducting Solids, by F. Moglich, N. Richt. GERMAN, per, <u>Z fuer Technische Physik</u>, Yoo, 1940, pp 128-133.
*Nave/NRI

Some Results of the Study of the Security Envelopes of the Rapsodie, by G. Drevon, M. Faigayrettes, 15 pp. 11 ALIAN, rpt, <u>Symposium on Fast Reactors</u>, 17-19 Jun 1963. 9221930 AEC-11-6324 Effects of Collimation and Oblique Light Rays on Three-Sided Right-Angle Priam Interferometers, by Y. Sakurai. JAPANESE, per, <u>Seimitsu Kikai</u>, Vol XXVI, No 5, 1960, pp 270-275.
CSIRO/No 5393

The 70 MC/S Frequency Modulator, by H. Dage. NOR WEGIAN, por, Elektrotekniak Tidsskrift, Vol LXXVI, No 4, 1963, pp 61-63. R.A.E. Tr 1048

Determination of Optimum and Critical Performance Parameters of Non-Isobaric Engine With Divergent Nozzle, by R. Stantszowski. POLISII, per, Archiwum Budowy Maszyn, Vol X, No 2, 1963, pp 103-140. *FTD-TT-64-497

Relationship Between Absorption and Luminscence Spectra of Complex Molecules, by Alfons Kawski, Maria Korba, 16 pp. POLISI, per, <u>Postepy Fizki</u>, Vol XIV, No 1, 1962, pp 101-113, Navy Tr 3749/ONI 981

A General Method for Controlling Combustion Processes, by Jerzy Muzyczuk, 41 pp. POLISH, per, <u>Prace Glownego Instytutu Gornictwa</u>, No 261, 1960, pp 1-17. 9221979 OTS 61-31322 PL-480

Strebs Calculation in an Open Cylindrical Shell Subjected to the Action of Centrifugal Forces, by Szczepan Borkowski, 39 pp. POLISH, per, <u>Rozprawy inzynterskie</u>, Vol X, No 3, 1962, pp 459-496, 9692457 DDC RSIC-155

On the Problem of Stereoscopy to the Bubble Chamber Correction of Refraction, by D. Nyagu, 13 pp.
RUMANIAN, per, Revue de Physique, Vol IV, No 2, 1959, pp 235-243. 9692456
DDC RSIC-157

Chemical Bond Relations in Electron Paramagnetic Resonance Spectra by Olimpia Constantinescu, RUMANIAN, per, <u>Studit Cercetari Fiz</u>, No 13, 1962, pp 795-806.
*FTD-1T-04-460

20 Ton Merce Cross-Country Automotive Crabe, by Nils Weaker. SWEDIST, per, <u>Tidskrift (Fortifikation</u>, No 3, 1903, pp 59-7). *ACSI 1-1027 II) 220-4011464

Source of Protons With Thermal Disassociation of 112 Molecules, by M. D. Gahovich, Z. P. Fedorus, UKRAINIAN, per, <u>UKRAIN 1-12 Zhu</u>r, Vol 1, No 2, 1956, pp 158-469.
*FTD-17-64-522

Investigation of Plasmoids, by Means of a Thermocouple, by I, I, Demindenko, N. I, Mitina, UKRAINIAN, per, <u>Ukrain</u> F12 <u>Zhur</u>, Vol VIII, No I, 1963, pp 64-72. Navy Tr. 3793 APL 1986

Excitation of Longitudinal Waves in a Plasma by Radiowaves, by A. M. Federchenko. UKRAINIAN, per, Ukrain Fiz Zhur, Vol VIII, No 5, 1963, pp 555-559. *ACSI 1-4367 ID 2204008664

Role of Ion Velocity During the Excitation of Plasma Oscillations by an Ion Beam, by M. D. Gabevich, G. S. Kirichenko, 7 pp. UKRMMAN, per, Ukrain F12 Zhur, Vol VIII, No 6, 1963, pp 624-627, 3692299 F1D-14-64-II5

Scientific Miscellansous

Scientific Information Institute of the Soviet Academy of Sciences; Organization and Activities, by A. P. Kritakaya, \$1 pp.
RUSSIAN, bk, Institut Nauchnoy Informatsii Akademii Nauk SSSR, Moscow, 1963, pp 1-32.
JPRS 24691

Problems of Cybernetics. (DC-10511) RUSSIAN, bk, <u>Problemy Kibernetiki</u>, Moscow, No 10, 1963, pp 1-288. *JPRS

Problems of Mental Development, by A. N. Leont yev, 229 pp. RUSSIAN, bk, Problemy Razvitiya Psikhiki, Moscow, 1959, pp 1; 128-156; 267-316; 319-477; 495. JPRS 24309

Programmed Instruction and Cybernetic Teaching Machines, by A. I. Shestakov. (SF-3131) RUSSIAN, bk, Programmirovanye Obucheniye 1 Kiberneticheskiye Obuchayushchiye Mashiny, 1963, pp 1-247.
*JPRS

Activities of the Academy of Sciences USSR and the Academies of Sciences of the Union Republics During 1962, 28 pp.
RUSSIAN, encyclopedia, Yezhegodnik Bollshoy Sovetskoy Entsiklopedii, Moscow, 1963, pp 81-84; 106; 111; 115; 119; 125; 129; 133; 137; 141; 142; 146; 165; 173; 179; 186.
JPRS 24352

USSR Academy of Sciences - Results and Prospects Reviewed, by N. Sisakyan, 5 pp. RUSSIAN, ap, <u>Izyestiya</u>, 5 Feb 1964, pp 1, 2. JPRS 23919

Works Accepted for Competition for 1964 Lenin Prizes, 7 pp. RUSSIAN, up, <u>Izvestiya</u>, 19 Feb 1964, p 3. JPRS 24126

Cybernetics and Pedagogy Teaching Machines in Soviet Schools, by V. Glushkov, 13 pp. RUSSIAN, per, <u>Nauka i Zhizu</u>, No 1, 1964, pp 16-24. JPRS 24510

The 1964 Lenth Prizes Recognize Attainments in Soviet Science and Technology, by M. V. Keldysh, 6 pp. RUSSIAN, np. Pravda, 22 Apr 1964, pp 3, 4. JPRS 24608

Pressing Problems of Programmed Instruction, by N. F. Talyzina, V. M. Lomonosov, 18 pp. RUSSIAN, per, Radyans ka Shkota, Vol XLII, No 9, 1963, pp 37-44. JPRS 24365

Structure and Work of Moldavian Academy of Sciences, 15 pp.
RUSSIAN, per, Yest Ak Nauk SSR, No 2, 1964, pp 3-12.
1008-24307

Capacity of Information Systems, by G. S. Fedenev, 10 pp. RUSSIAN, per, <u>Vest TsNII MPS Tsentral Nauchnolaste Inst Minister Putcy Soobsheli</u>, Vol XXII, No.5, 1963, pp 61-64. JPRS 25315

Programmed Instruction and Certain Pedagogical Problems, by S. I. Zinov'vev, 9 pp. RUSSIAN, per, <u>Vest Vysshey Shkoly</u>, No 12, 1963, pp 45–51. JPRS 24065

Scientific Miscellaneous (Contd)

Classification of Marter and Motion in Marxist Philosophy, by A. I. Ignatov, 16 pp. RUSSIAN, per, <u>Yoprosy Pilosofti</u>, Vol XVIII, No 1, 1964. JPRS 24562

Methodology for Research in Structures and Systems, by A. G. Spirkin, B. V. Sazonov, 8 pp. RUSSIAN, per, <u>Voprosy Pilosofii</u>, Vol XVIII, No 1, 1964.
JPRS 24562

Lahor Activity as Affected by the Strength of Norvous System Excitation, by L. A. Kopytova, 11 pp. RUSSIAN, per, Voprosy Psikh, Vol X, No 1, 1964, pp 25-32.

JPRS 24384

Some Features of the Formation of Sound Pitch Differentiation in Early Age, by r. K. Mukhina-Korotova, 15 pp. RUSSIAN, per, <u>Voprosy Psikh</u>, Vol X, No 1, 1964, pp 61-70, JPRS 24374

Features of the Orientation Reaction During Prolonged Exposure to Stimult of Young Children, by R. F. Streffinishaya, 7 pp. RUSSIAN, per, <u>Voprosy Psikh</u>, Vol X, No 1, 1964, pp 145-149, JPRS 24374

Some Features of the Attitudes of Young School Children to Literary Revocs, by L. N. Rozhina, 20 pp. RUSSIAN, per, <u>Voprosy Psikh</u>, Vol X, No 1, 1964, pp 163-177. JPRS 24374

Tomor Specialist Professor Hsich Chih-Kuang Interviewed, by Shih Yun-chen, 6 pp. CHINESE, per, Chang-kuo Hsin-wen, 1 Apr 1964, pp 27, 28. JPRS 24552

Achievements of Slovak Academy of Sciences in Past Ten Years, by Dionyz Blaskovic, 17 pp. CZECH, per, <u>Nova Mysl</u>, No 8, 1963, pp 908-919, JPRS 24302

The Development of Photogrammetry in the Soviet Union, by W. Koch, 9 pp. GERMAN, per, <u>Vermessungstechnik</u>, Vol XI, No 7, 963, pp 241-244, JPRS 24157

New Aspects in the Statistical Characterization of Technical and Scientific Research, by I. Marcus, M. Flachs, 10 pp. Revista de Statistica, Vol XIII, No. 1, 1964, pp. 25-31.

J PRS 24389

Achievements in 1963 and Plan for 1964 of the Rumanian Academy of Sciences, 9 pp. RUMANIAN, np. <u>Scinteia</u>, 20 Jan 1964, p 3. JPRS 24047

Investigation of a Discrete Centralized Information Gathering System With Cyclo-Sporadic Action, by O.S. Belima, 12 pp. UKRAINIAN, per, <u>Avtomatyka</u>, No 1, 1964, pp 19-28. JPRS 23923

The Problem of Constructing Combined Deterministic and Self Teaching Systems for Medical Treatment, by O. H. Ivakimenko, H. H. Finohyeyeva, 21 pp. UKRAINIAN, per, <u>Aviomatyka</u>, No 1, 1964, pp 43-58, JPRS 23923

Systems of Coupling Computers With Control Objects, by V. H. Lapa, 8 pp. UKRAINIAN, per, Aviomatyka, No 1, 1904, pp 59~63, JPRS 23923

Scientific Miscellaneous (Contd)

Experience in Programmed Instruction in Fereign Languages, by V. Peshekhonova, A. Zavoloka, 9 pp. UKRAINIAN, per, <u>Radvans ka Shkula</u>, Vol XLII, No 5, 1963, pp 48-51.

JPRÉ 24285

Examining Machine Om-1, by V. P. Puhanov, A. A. Neven, 8 pp.
UKRAINIAN, per, Radyans'ka Shkola, Vol XLII, No 9, 1963, pp 45-50.
JPRS 24365

On the Status and Prospects of the Future Development of Scientific Research on the Problem of the Scientific Principles of Strength and Ductility, 5 pp. UKRAINIAN, per, Dopovidi Ak Nauk Ukrayins, No. 3, 1964, pp. 413-415, IPRS 24494

Scientific Miscellaneous (Contd)

Man and Machine, by P. Kopnin, 7 pp. UKRAINIAN, per, <u>Nauka i Zhytrya</u>, Vol XIII, No 7, 1963, pp 6-9. JPRS 24230 "在曹操"是人工

Steps Along a Cliff and the Brain as a Televisor, by V. Svetlova, 5 pp.
UKRAINIAN, per, Nauka i Zhyttya, Vol XIII, No 7, 1963, pp 6-9.
JPRS 24230

INFORMATION RECEIVED DURING MAY

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ON COVER-TO-COVER TRANSLATIONS

Acta Biochimica Polonica, Vol IV, No 1-4, 1957.

OTS 60-21377 PL-480

Acta Biochimica Polonica, Vol X, No 4, 1963.

OTS 63-11406 PL-480

Acta Poloniae Pharmaceutica, Vol XX, No 1, 1963.

OTS 63-11412/1 PL-480

BWRA

Avtomaticheskaya Svarka, No 1, 1964.

Instru Soc of Amer

Byulleten' Eksperimental'noi Biologii i Meditsiny, Vol LV, No 1, 2, 1963.

Avtomatika i Telemekhanika, Vol XXIV, No 10, 11, 1963.

СВ

Doklady Akademii Nauk SSSR, Physical Chemistry Section, Vol CXLIX, No 1-6, 1963.

CB

Doklady Akademii Nauk SSSR, Physics Section, Vol CLII, No 4-6, 1963.

Amer Inst of Phys Sov Phys-Doklady Vol VIII, No 10

Fizika Tverdogo Tela, Vol V, No 10, 1963.

Amer Inst of Phys Sov Phys-Solid State

Vol V, No 10

Folia Morphologica, Vol XXII, No 2, 1963.

OTS 63-11413/2

PL-480

Geodeziya i Aerofotosiemka, No 1-3, 1963.

Amer Geophys Union

Geokhimiya, No 1, 2, 9, 1963.

Scripta Technica

Geomagnetizm i Aeronomiya, Vol III, No 1-4, 1963.

Amer Geophys Union

Izmeritel'naya Tekhnika, No 10, 1963.

Instru Soc of Amer

Izvestiya Akademii Nauk SSSR, Otdelenie Khimicheskikh Nauk, No 3-5, 1963.

CB

Izvestiya Akademii Nauk SSSR, Otdelenie Tekhnicheskikh Nauk, Tekhnicheskaya Kibernetika, No 1, 1964,

JPRS 24536

Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya, Vol XXVII, No 4, 1963.

CTT

Izvestiya Akademii Nauk SSSR, Seriya Geofizicheskaya, No 12, 1963.	Amer Geophys Union
Izvestiya Vysshikh Uchebnykh Zavedeniy, Priborostroyeniye, Vol VI, No 4, 1963.	JPRS 24617
Izvestiya Vysshikh Uchebnykh Zavedeniy, Priborostroyeniye, Vol VII, No 1, 1964.	JPRS 24515
Izvestiya Vysshikh Uchebnykh Zavedeniy, Radiofizika, Vol VI, No 6, 1963.	JPRS 24633
Kinetika i Kataliz, Vol IV, No 2, 1963.	CB
Kolloidnyi Zhurnal SSSR, Vol XXV, No 4, Jul, Aug 1963.	СВ
Metallovedeniye i Termicheskaya Obrabotka Metallov, No 7-9, 1960.	Acta Metallurgica
Metallovedeniye i Termicheskaya Obrabotka Metallov, No 1-12, 1961.	Acta Metallurgica
Metallovedeniye i Termicheskaya Obrabotka Metallov, No 1-12, 1962.	Acta Metallurgica
Mikrobiologiya, Vol XXXII, No 3, May, Jun 1963.	СВ
Mikrobiologiya, Vol XXXII, No 4, Jul, Aug 1963.	СВ
Optika i Spektrosko p iya, Vol XVI, No 1, 1964.	Ontical Soc of Amer
Poroshkovaya Metallurgiya, No 3 (15), 1963.	СВ
Poroshkovaya Metallurgiya, No 4 (16), 1963.	CB
Pribory i Tekhnika Eksperimenta, No 5, 1963.	Instru Soc Amer
Radiotekhnika i Elektronika, Nol VIII, No 6-8, 1963.	IEEE
Teoriya Veroyatnostei i Yeye Primeniya, Vol VIII, No 2, 1963.	SIAM
Tsvetnye Netally, Vol III, No 12, 1962.	Primary Sources
Vestnik Akademii Meditsinskikh Nauk SSSR, Vol XVIII, No 12, 1963.	JPRS 24398
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Vestnik Akademii Meditsinskikh Nauk SSSR, Vol XIX,

No 1, 1964.

Vestnik Svyazi, No 3, 1964.

Voprosy Kosmogonii, Vol II, 1954. JPRS 24260 Voprosy Kosmogonii, Vol V, 1957. JPRS 24358 Voprosy Kosmogonii, Vol VI, 1958. JPRS 24435 *ACSI I-4583 Voyenno-Meditsinskiy Zhurnal, No 1, 1963. ID 2204013964 Zavodskaya Laboratoriya, Vol XXIX, No 9, 10, 1963. Instru Soc of Amer Zhurnal Analitcheskoi Khimii, Vol XVIII, No 6-8, 1963. CB Zhurnal Eksperimental'noi i Teoreticheskoi Fiziki, Amer Inst of Phys Sov Phys-JETP Vol XLV, No 4, 1963. Vol XVIII, No 3 Zhurnal Obshchei Khimii, Vol XXXIII, No 6, 1963. CBZhurnal Prikladnoi Khimii, Vol XXXVI, No 3, 1963. CB Zhurnal Tekhnicheskoi Fiziki, Vol XXXIII, No 10, 1963. Amer Inst of Phys Sov Phys-Tekh Phys Vol VIII, No 10 Zhurnal Tekhnicheskoi Fiziki, Vol XXXIII, No 11, 1963. Amer Inst of Phys Sov Phys-Tech Phys Vol VIII, No 11

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(Herald of the Academy of Medical Sciences USSR)

Vol XVIII, No 12, 1963

[Following is a complete translation of the Russian-language medical journal Vestnik Akademii Meditsinskikh Nauk SSR (Herald of the Academy of Medical Sciences USSR), Vol XVIII, No 12, Moscow, 1963, pages 3-97.]

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PROBLEMS OF COSMOGONY

- USSR -

Following is the complete translation of a Russian-language collection of articles entitled Voprosy kosmogonii (Problems of Cosmogony), Volume II, published by the Academy of Sciences USSR, Moscow, 1954, pages 1-363, and signed to the press on 29 January 1954. The names of the authors accompany each section or individual article.

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PROBLEMS OF COSMOGONY

Volume V

- USSR -

Following is the complete translation of a Russian-language collection of articles entitled <u>Voprosy Kosmogonii</u> (Problems of Cosmogony), Volume V, published by the Academy of Sciences USSR, Moscow, 1957, pages 1-299, and signed to the press on 22 April 1957. The names of the authors accompany each section or individual article.

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PROBLEMS OF COSMOGONY

Volume VI

- USSR -

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Colorimetric Determination of Potassium with Dilituric Acid (Exchange of Experience).

Optimism Conditions for the X-Ray Spectral Analysis of Solutions, M. A. Blokhin

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and Sh. I. Duimakaev

Polarographic Determination of Aluminum in Alloys (Exchange of Experience),

METHODS OF SPECTRAL ANALYSIS

A translation of Zavodskaya Laboratoriya, a publication of the State Scientific I echnical Committee of the Council of Ministers of the USSR

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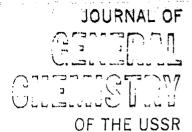
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UNCLASSIFIED
Central Intelligence Agency



7 September 2004

Ms. Roberta Schoen
Deputy Director for Operations
Defense Technical Information Center
7725 John J. Kingman Road
Suite 0944
Ft. Belvoir, VA 22060

Dear Ms. Schoen:

In February of this year, DTIC provided the CIA Declassification Center with a referral list of CIA documents held in the DTIC library. This referral was a follow on to the list of National Intelligence Surveys provided earlier in the year.

We have completed a declassification review of the "Non-NIS" referral list and include the results of that review as Enclosure 1. Of the 220 documents identified in our declassification database, only three are classified. These three are in the Release in Part category and may be released to the public once specified portions of the documents are removed. Sanitization instructions for these documents are included with Enclosure 1.

In addition to the documents addressed in Enclosure 1, 14 other documents were unable to be identified. DTIC then provided the CDC with hard copies of these documents in April 2004 for declassification review. The results of this review are provided as Enclosure 2.

We at CIA greatly appreciate your cooperation in this matter. Should you have any questions concerning this letter and for coordination of any further developments, please contact Donald Black of this office at (703) 613-1415.

Sincerely,

Moncy Later Safer Sergio N. Alcivar

Chief, CIA Declassification Center, Declassification Review and Referral

Branch

Enclosures:

- 1. Declassification Review of CIA Documents at DTIC (with sanitization instructions for 3 documents)
- 2. Declassification Status of CIA Documents (hard copy) Referred by DTIC (with review processing sheets for each document)



Processing of OGA-Held CIA Documents

The following CIA documents located at DTIC were reviewed by CIA and declassification guidance has been provided.

OGA Doc ID Job Num Box Fidr Doc	Job Num	Вох	Fldr	,	Doc ID	Document Title	Pub Date Pages	Pages	Decision	Proc Date
AD0834364	78-03109A	52	-	9	62	Consolidated Translation Survey For February 1963	2/1/1963	232	Approved For Release	3/25/2004
AD0402915	78-03109A	25	-	7	63	Consolidated Translation Survey For March 1963	3/1/1963	314	Approved For Release	3/25/2004
AD0405169	78-03109A	52	-	89	64	Consolidated Translation Survey For April 1963	4/1/1963	278	Approved For Release	3/25/2004
AD0409473	78-03109A	25	-	6	65	Consolidated Translation Survey For May 1963	5/1/1963	358	Approved For Release	3/25/2004
AD0413153	78-03109A	53	-	-	99	Consolidated Translation Survey For June 1963	6/1/1963	361	Approved For Release	3/25/2004
AD0414818	78-03109A	53	-	2	29	Consolidated Translation Survey For July 1963	7/1/1963	249	Approved For Release	3/25/2004
AD0418328	78-03109A	53	-	ဗ	89	Consolidated Translation Survey For August 1963	8/1/1963	324	Approved For Release	3/25/2004
AD0834365	78-03109A	53	-	4	69	Consolidated Translation Survey For September 1963	9/1/1963	193	Approved For Release	3/25/2004
AD0423936	78-03109A	53	-	2	70	Consolidated Translation Survey For October 1963	10/1/1963	232	Approved For Release	3/25/2004
AD0426736	78-03109A	53	-	9	71	Consolidated Translation Survey For November 1963	11/1/1963	298	Approved For Release	3/25/2004
AD0428566	78-03109A	53		7	72	Consolidated Translation Survey For December 1963	12/1/1963	298	Approved For Release	3/25/2004
AD0431011	78-03109A	53	-	8	73	Consolidated Translation Survey For January 1964	1/1/1964	273	Approved For Release	3/25/2004
AD0433215	78-03109A	53	-	თ	74	Consolidated Translation Survey For February 1964	2/1/1964	200	Approved For Release	3/25/2004
AD0437984	78-03109A	24	-	-	75	Consolidated Translation Survey For March 1964	3/1/1964	305	Approved For Release	3/25/2004
AD0440831	78-03109A	24	-	7	92	Consolidated Translation Survey For April 1964	4/1/1964	155	Approved For Release	3/25/2004
AD0442174	78-03109A	54	-	ဗ	77	Consolidated Translation Survey For May 1964	5/1/1964	249	Approved For Release	3/25/2004
AD0443106	78-03109A	54		4	78	Consolidated Translation Survey For June 1964	6/1/1964	191	Approved For Release	3/25/2004
AD0444756	78-03109A	54	-	2	79	Consolidated Translation Survey For July 1964	7/1/1964	169	Approved For Release	3/25/2004
AD0447557	78-03109A	54	-	9	80	Consolidated Translation Survey For August 1964	8/1/1964	153	Approved For Release	3/25/2004
AD0450482	78-03109A	54	, .	7	18	Consolidated Translation Survey For September 1964	9/1/1964	141	Approved For Release	3/25/2004
AD0451428	78-03109A	24	-	80	82	Consolidated Translation Survey For October 1964	10/1/1964	149	Approved For Release	3/25/2004
AD0453181	78-03109A	24	-	6	83	Consolidated Translation Survey For November 1964	11/1/1964	157	Approved For Release	3/25/2004
AD0455133	78-03109A	24	-	10	84	Consolidated Translation Survey For December 1964	12/1/1964	121	Approved For Release	3/25/2004
AD0456859	78-03109A	54	-	Ξ	85	Consolidated Translation Survey For January 1965	1/1/1965	179	Approved For Release	3/25/2004
AD0458780	78-03109A	24	-	42	98	Consolidated Translation Survey For February 1965	2/1/1965	161	Approved For Release	3/25/2004
AD0461501	78-03109A	25	-	-	87	Consolidated Translation Survey For March 1965	3/1/1965	301	Approved For Release	3/25/2004